

#### Questions for Developer Telecon on Distribution:

(In some cases we know at least part of the answer. In those cases I've enclosed the answer in parenthesis and put it in Italics. I've left these questions in as I thought they were germane to the larger question.)

#### GUI Questions

1. Why are the GUI's such resource hogs? As of now, operators are required to bounce their distribution GUI almost three times a day and we're told to bring up the Storage Management GUI only when needed. Can this be fixed and if so when?

*STMGT GUI has fixed all known memory leaks and should not have to be bounced. DDIST server status is unknown, but I believe that the memory leaks in it have been addressed as well.*

2. Print report - Ingest GUI in the history log is incomplete. Is there a way to change the options for the printer and print the whole log if needed from the screen?

3. Ingest GUI, Media Ingest tab, D3 tape. This freezes all xterms and the GUI. This is operationally unusable. Can it be changed? Why is this done?  
*We have not seen the GUI freeze xterms. The interface between the GUI and the STMGT servers is synchronous and the GUI itself will be frozen during D3 ingests.*

4) User Profile button on add/edit window of the subscription GUI does not work. When you click this button it crashes the GUI and you have to restart from the beginning. It supposed to retrieve user profile from the MSS database.

5) Subscription GUI does not allow to view Qualifiers once the subscription is generated. You have to completely exit the application and then edit the subscription in order to find what were the qualifiers for that subscription.

6) Subscription order tracking - MSS order tracking GUI should include the subscriptions under user name entered through the Subscription GUI. This appears to be a problem, currently not displaying these requests, could be a problem of connecting to MSS.

7. The 'Resume Activity' button on the Stmgt GUI does not appear to work. How should it function?

*Resume button is associated with the backup/restore screen and will only work with backup activities. Resume will finish the backup of a file if it failed the copy to the backup archive group. For restore, the button does not work. These comments apply only to 4PY Bath drops and later.*

#### General Distribution

1. From the SSI&T side of the house and the Distribution GUI: Recently, during our testing of ASTER routine processing, it came to my attention that ASTER input data coming from the archive goes through the Distribution subsystem while being staged for higher level processing. This data shows up on the Distribution GUI. We really noticed it because of the current practice of "throttling" (running in suspend all mode) distribution which effected ASTER processing also.

a. Will this always be the case? (No. Landover is working on a cure for the problem that requires us to "throttle".)

b. What will an operator typically do with that GUI? (If the system works correctly, only recover from failures.)

The DDIST GUI allows tracking of the order as it goes through the distribution process. Dealing with failures is one aspect of the GUI. Successful distributions may require additional operator actions (e.g. bundling tapes together). The GUI allows for the operator to change the state of the request after performing some additional task. There is additional information on the GUI to aid the collection of all the media associated with a given request.

c. Is there a way not to include the data stages to the science processor on this GUI? At least a filter perhaps?

All data to processing goes via Ftp Push. DDIST GUI provides the hooks to filter based on the type of distribution, but the filtering does not work.

d. Is there a way to monitor ASTER and MODIS distribution (ftp and 8mm - and CD someday:)? (Yes, through the GUI.)

2. How do the priority functions in the SDSRV and DDIST work? What is the queuing mechanism?

DDIST has a dynamically configurable number of threads for each of 5 priorities (express, very high, high, medium, and low). Requests in excess of the number of threads for a priority will be queued on the queue for that priority.

3. What is the status of data compression as a distribution option?

Scheduled for 6A.

4. Explain the distribution scenario for standing orders that have been initialized by subscription service. In looking at DID313 ECS Internal ICD, pg. 3-77, there is a comment that standing orders are not currently tracked orders and the user that DDIST sends the notification to is determined from the 'order'. Since there is no 'order' and thus no email address, the default appears to be sending the email to the distribution technician to be forwarded. Ok, maybe this would work for a few orders, but how does the technician know whom the order is for? How does the statement in DID313 correlate with the email address entered when the subscription is initialized?

There is a requestor name that is associated with the subscription. The MSS User Profile is consulted for the email address.

5. I would like to discuss the TT#629 which transforms to NCR#ECSed20747. If a data distribution request happens to have an end date not defined, the default date entered is the year 1901 and I would like to make sure that it is not a Y2K problem. The response to the NCR came from Mark Pellitier, but I would just like further clarification. I have mentioned it several times that the default end date should be in the future and not in the past and could this cause problems once the year 2000 is here as you will be searching for orders that are a century old then.

There was a fix for a Y2K bug that was put into the server code as a result of internal Y2K testing. The year is being held as a 4 character value rather than 2. If the problem repeats, then it should be NCR'ed and will be worked off on the basis of priorities.

## FTP Distribution

1) How are ftp push errors going to be handled? Will a diagnostic message be generated as to why a FTP push fails?

STMGT code has been changed to trap ftp errors and return them with more specifics as to what error has occurred. This is being done in part to allow clients to determine whether the ftp push should be retried or not.

2) Can an ftp push be redirected after it fails to push to a specific machine (i.e. ftp push to a machine other than the one originally specified in the subscription.)

No. This is not planned either.

3) Is the number of ftp retries configurable. Can we set a time limit before the ftp push is considered failed.

The ARCHRESCONFIG file is the configuration file that affects the behavior of STMGT's ftp servers (IngestFtp and FtpDis). The number of retries and the sleep time between each retry is located in that file.

4. Network Data Distribution (FTP Push): For a large the request, the request will be processed as subrequests which will be delivered to the requester individually (i.e., the request will be broken down into smaller, more manageable pieces. The Operator can view the details of such a request via selection of a view function, which exists in the Release A CDR design and will be augmented to support operator sectioning of these large requests. Is this still coming and when? Is it only for CDR?

The DDIST design presented in Release B CDR had the capability of sectioning requests. There was a lot of discussion at that presentation and disagreement with the design. The focus of the disagreement was that DDIST was too low in the chain to do the breakup of the request into smaller parts. I don't know what came of the discussion past that point, except that DDIST has no design to partition request. It does have a maximum request threshold and a threshold for the maximum amount of data that will be transferred for a given media type (considering ftp push and pull to be media types). Current behavior is to suspend any request that trips one of the thresholds. The operator would then either chose a time to let the activity go or cancel the request with notification going back to the user that the request was too large. There is no work planned in DDIST for breaking up requests.

## Tape Distribution

1) 8 mm Tape orders- Having problems with the 8 mm media orders, orders showed status as transferring data on the DDIST GUI for long time. Data Distribution tech. person reported that the tape was not spinning or nothing was written to the tape. Debug log showing DsStDbInterface error as DsStSlSelectOpenSlotDrive: available drive for medium Type 8 mm does not exist | Thread 21.

This could be the result of the following:

1. There are no available tapes
2. The drives all busy
3. If the version of the code is old enough, then there could be a problem with the media type being passed in as 8mm rather than 8MM. It's been long enough ago, that I can't remember if the request was failed or queued.

For cases 1 and 2, the request would be queued waiting for resources to become available. In case 1, reassigning a tape group to the stacker would key the request to become active.

2. The list of files on L7 packing list was all mixed up the other night. Used to be in same order as QA printout. Should this be checked/fixed or is unimportant?

Don't know what the QA printout is. If the QA printout is not the result of ECS custom code, I doubt there will be a way to coordinate the Packing slip and the printout.

3. The system does not provide for shipping labels for Aster products. DORRAN prints the mailing labels for Landsat7 but since Aster is free, it does not go through DORRAN. Hence, no shipping labels. This is not acceptable operationally. See trouble ticket #861

Shipping labels were removed from schedule DDIST work. There is a shipping address that comes in.