

Data Distribution General Questions:

- **How is data going to be written to the 8mm tapes? Are they going to use the 'tar' command or the UNIX 'dd'?**

It's a tar.

- **Packing List Preamble of Data Distribution Operator GUI ~ Is this a generic statement or specific to the media produced? If these are printed automatically ~ where are they printed?**

Media specific—it's taken from a flat file which is specified in the .CFG file. The GUI Packing List tab will provide the operator with the ability to edit these Packing List Preambles on a per media basis (not fully implemented yet).

- **Data Distribution Operator GUI. Does it track by order or request? If it is by order ~ how do you suspend, resume, etc. a request? If it is by request and request is the same as granule, then the #granule field is always 1.**

The Data Distribution GUI tracks requests (not orders); however, each request can have an order id associated with it. I have not seen this field used yet.

- **On the Distribution Request tab are the priorities tied to the type of requester account?**

Yes, they are.

- **If push is not successful ~ is it attempted to be pushed again? How many times ~ is there notification to user? Requester vs. ECS system probs.**

If the push is failed with a retryable error by stmgmt, we suspend it (after 5 tries), and the operator can try to restart it. If it generated a fatal error, it is failed, and it would have to be restarting by one of our clients. There is notification to the user for fatal errors.

- **Will 8mm output media be available on low- and high-density tapes? If only high-density will be available, it must be stated clearly to our users to avoid confusion.**

The tape capacity, which is specified in the ARCHRESCONFIG file, should be set to the lowest (available) capacity on the 8mm tape. This doesn't directly answer your question, but none of the Clients (BOSOT, V0 Web Client) that I've seen distinguish between high and low density. This is, to some degree

an operations issue and relies upon the capacity of the tape drive, which is currently around 4GB. Future hardware purchases at the DAACs may change this. Operations must know the capacity of the tapes that they are using and set the ARCHRESCONFIG file accordingly. The users, per se, don't really have a choice in the density

- **Physical media operations are vary vague at this stage of the ECS project. For example, will the distribution system be able to correct tape faults?**

This really isn't settled.

- **If so, will this be a manual or automatic process? There is currently no mechanism for labeling tape cartridges or performing quality control of hard media products?**

True, those capabilities are not available. We are still working on the answer as to whether it will be a manual or automatic process.

- **What does the end time on distribution request tabs of the Data Distribution Operator GUI represent? Our example had a future date of 12/21/00.**

When a request is received, we attempt to insert a null date/time in the end time. This comes out to 00:00:01 1 January 1901, GMT. Adjusted to EST it becomes 17:00:01 31 December 1900. That's why the end time looks like a Y2K time before a request finishes.

- **In the tape ID window of the distribution GUI is the data going to be real time? e.g., tape 2 is processing on drive 3, then when the running completes it leaves the tape ID window; or does this window give you a log so that you can monitor production and track by drive. So that if tapes 12, 35 and 90 are bad can you do back and tell which drives they ran on to figure out if it's a drive problem? How often are the requests purged? Is it automatic?**

The tape ID window in the DDIST Gui is implemented with a built in refresh capability. As requests appear in the database by Storage Management , they are displayed in the DDIST GUI. They track by stacker, not drive.

The tape id is being used solely for collating the request. Information about which drive had an error with which tape should be in the STMGT logs, but there aren't any error messages that correlate the tape drive and tape id. There were issues about the error message being written at a level (in the software) where the information about the tape id and device id was not present. The information is written out, but to the 8mm server .ALOG. The

only way to get the information about what drives were being used with which tapes during a failure would be to cull those messages out of the .ALOG. Unfortunately right now, the error message is not logged using the new STMGT error logging, so the message is not saved to the database. This will change when we go to multi-server scheduling, but that won't be until 6A.

- **What reporting functions do we have for distribution functions; e.g., How many D3 tapes did we produce last month? Or How many orders did we have for ftp push versus ftp pull?**

This capability is not yet implemented, but we are currently scoping the task.