COLxxx

Trigger: OSF = 'w' in DC stage

Summary:

This stage attempts to collect products from the science pipeline in order to satisfy an OTFR request. When the needed products are ready in the science pipeline, they are copied back to the OTFR request-specific directory. A timeout scheme is implemented so that a collector will not wait indefinitely for science pipeline products to be ready before closing-out an OTFR request

There are two styles of collectors: one for the multi-file association instruments (NICMOS, ACS), and one for the others (WFPC-2, STIS, etc.). The multi-file association collector has the added complication of collecting science output for all association members and the requested product. The **`.podlist`** file contains the names of the exposures that drive the multi-file association collection. The triggering OSF supplies the name of the DATASET for the other type of collector.

Both collectors begin by checking for the presence of a timeout file. This file will appear in the OTFR request-specific subdirectory and be named **`TIMESTAMP_DATASET.timeout`**. It is created the first time the collector starts working on a particular OTFR request, and is used to limit the amount of time a collector will wait for needed output from the science pipeline. The age of this empty file is checked each time the collector is retriggered, and if the age of the file is greater than TIMEOUT_INTERVAL, then the collector picks up copies of any needed science output that is ready, and proceeds to flush this OTFR request from the pipeline. Any science output that is not ready by this time is considered lost.

If timeout has not occurred, then the status of the calibration stage *in the science pipeline path* (DATA_REDUCTION_PATH) is checked for each needed science output by testing the OSF. Only the DATASET is tested for WFPC-2 and STIS. All association members and the *primary* product are tested for NICMOS and ACS (OSFs are not created in the science pipeline for sub-products). If the status value(s) for calibration show COMPLETE (c), NOT PERFORMED (n), or FLUSHED (f), then science processing is considered done, and all needed science output files are copied back from the science pipeline directory (CAL_DIR) to the OTFR request-specific directory. The list of needed science output files is obtained from the **`.podlist`** contents and the requested DATASET.

The ***ARCH_SERVER::ARCH_DB:otfr_request_stats*** database relation is updated with the timestamp when collection completed, regardless of whether normal completion or a timeout occurred.

OPUS Resource File Entries

CAL_DIR – location in the science pipeline for picking up completed science output files
DATA_REDUCTION_PATH – name of the science pipeline path
TIMEOUT_INTERVAL – interval (in days) that must pass before a collector will force collection of science, as is
ARCH_SERVER – DADS database server
ARCH_DB – DADS database

Success Conditions

Science output files copied to the OTFR request-specific subdirectory.
OSF.DC = c
OSF.2F = w
Science output files not yet ready for this request (and timeout not yet expired)
OSF.DC = z

Error Conditions

Failure to open the .podlist file
Failure to create the .timeout file