status field is filled from the OSF_START_STATUS resource entry. The data-id field of the OSF (in this case set to 'wf2') is filled from the POL_DATATYPE resource entry.

If a request does not contain a DATASET_NAME entry, then the request is considered corrupted, is renamed with a special file extension addition (FILE_ERROR), has an OSF created for the "bad" request (PO = 'b') to bring the error to the operator's attention, and will remain in the polling directory (FILE_DIRECTORY1) until further action is taken.

If OSF creation fails for a DATASET_NAME entry in the OTFR request, then the OTFR request will be renamed with a special file extension addition (FILE_ERROR) and this process will go ABSENT, indicating a problem to the OTFR operator in the PMG. This error is considered severe, because it likely indicates a problem in the OPUS architecture and would probably affect the processing of all datasets, so that is why the program is brought down.

A separate POLxxx OPUS resource file will exist for each instrument so that path-dependent locations for the instrument calibration directory can be used. This implies that a separate file polling process will need to be started in the OTFR pipeline for each instrument, though a single polling directory can be used to hold all requests if the file-polling mask is created with instrument-specific characters in it to differentiate between the instruments.

Once all OSFs are created, an entry is written to the ***ARCH_SERVER::ARCH_DB:otfr_request_stats*** database relation for keeping statistics on the key processing times for this OTFR request. Later pipeline tasks will update this database record with additional processing times, so that after the request has completed OTFR (successfully or not) this record will document how long processsing took, and whether or not processing problems were encountered.

OPUS Resource File Entries

FILE_DIRECTORY1 – directory searched for incoming request files
FILE_OBJECT1 – filemask used to search FILE_DIRECTORY1
FILE_PROCESSING – file extension addition appended to the request by the OPUS architecture
FILE_ERROR – special file extension addition appended to the request if an error occurs
OUTPATH – directory under which timestamp_dataset directories will be created for this instrument
POL_DATATYPE – 3-character instrument designator for use in OSF data_id field
OSF_START_STATUS – passed to the OSF_create utility to define the initial status column values in the OSF
ARCH_SERVER – name of DADS database server
ARCH_DB – name of DADS database

Success Conditions

TIMESTAMP_DATASET subdirectory created under instrument-specific CAL directory
A copy of the OTFR request will exist there with a new file extension.
A trailer file named TIMESTAMP_DATASET.trl will be created there, containing an echo of the OTFR request contents.
The original OTFR request in the polling directory will be deleted.
An OSF will be created for the DATASET_NAME listed in the OTFR request file with stages PO = c, LS = w.

Error Conditions

PROCESS GOES ABSENT
Missing calibration root directory (OUTPATH).
Failure to create OSFs by OPUS architecture.
REQUEST RENAMED WITH EXTENSION ADDITION "_BAD" AND ERROR OSF CREATED
Existing TIMESTAMP_DATASET subdirectory (i.e. DUPLICATE request). Has been seen when GETREQ is unable to delete requests it has picked up from DADS (because of a permissions problem). In this case it keeps picking them up again and again, causing POLxxx to flag the later ones as duplicates..
Failure to copy OTFR request from polling directory(permissions failure, etc.)
Read failures on local copy of OTFR request.
Bad format/corrupted/empty OTFR request or no DATASET_NAME entries found.