

Standards Change Request

Remove ARCHIVE_STATUS from DATA_SET_INFORMATION

SCR3-1108.v1

Provenance:

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Author(s): A.Raugh

Working Group: after suggestions made by the Archive Status Working Group, as discussed by the technical group (2007-03-21)

Problem:

Unlike other elements in the DATA_SET object and its subobjects, the ARCHIVE_STATUS value depends on external actions and changing states. In addition, it had been overlaid with concepts of how some data sets develop (accumulating vs. single delivery vs. versioning, for example). The result is rather confusing to data set catalog file writers generally, and requires updates to the data set catalog database that should probably be tracked elsewhere.

Priority:

Medium. The change seems to be generally desired, but it does involve changing the definition of a catalog object that is visible to all external data preparers and will required that we either ask them to make the change, or be prepared to make this change ourselves as the catalog files come in. It will also have implications for our own public interfaces to the central catalog database.

Proposed Solution:

Remove the ARCHIVE_STATUS keyword from the DATA_SET_INFORMATION object with the next release of the pdsdd.full file. Notify current data preparers in advance that this change is coming, so that they can respond appropriately to error messages that may be displayed by validation tools.

Impact Assessment:

Documentation changes

- PDS Standards Reference, Appendix B, Section B.1.6: Remove the line "ARCHIVE_STATUS = ARCHIVED" from the example.

- PDS Standards Reference, Appendix B, Section B.7.1: Remove “ARCHIVE_STATUS” from the list of required keywords for DATA_SET_INFORMATION.

Public Interface changes

- The PSDD database will require an update to remove the ARCHIVE_STATUS keyword from the DATA_SET_INFORMATION table, possibly moving it to another table.
- The pdsdd.full file and index will require an update
- There are some result pages in the data search interfaces at pds.jpl.nasa.gov include ARCHIVE_STATUS in the display. For example, at this result URL:

<http://starbrite.jpl.nasa.gov/pds/viewProfile.jsp?dsid=DIF-CAL-HR11-2-GROUND-TV1-V1.0>

Further affected pages will need to be discovered and amended appropriately.

Software changes

- Changes to the pdsdd.full file should propagate the change to the validators without further intervention.
- There will be changes required to at least some of the EN catalog tools that we use to get copies of existing catalog files, because these currently retrieve and list the ARCHIVE_STATUS keyword.

External Agencies

- We should notify the ESA developers of the pvv tool of the change, in case this effects when they next freeze their standard input files.
- External organizations and projects known to be preparing data set catalog files should be informed of this upcoming change and given a reasonably active effective date (or the consulting PDS node should offer to make the modifications to the incoming data set catalog files, depending on negotiations and agreements already made).

Additional Information:

Because catalog objects are defined as specific objects and not general objects, any changes to their element/object content are necessarily not backward-compatible. Consequently, some decision will need to be made about how this change might be propagated to data sets in preparation that may or may not already have DS catalog files on file. It's a fairly trivial change, but we need to consider the public relations involved in each case when it comes to making this change for data sets in active development.

Note that there are many other recommendations from the Archive Status Working Group that cannot be directly translated to SCR actions and which seemed more close related to issues of tracking status than specific keyword issues. The general consensus of the Technical Working Group telecon of 21 March 2007 was that these results and recommendations should be forwarded to the PDS Tracking Requirement Working Group, to be folded into their discussions.

Recommended Actions:

1. Schedule the removal of the ARCHIVE_STATUS keyword from the DATA_SET_INFORMATION object for the next PSDD database update and release of the pdsdd.full file, with documentation updates to be performed and released simultaneously.
2. Notify the EN interface developers of the anticipated change and request a more detailed impact statement, and particularly whether they can meet the schedule recommended in #1. If not, adjust accordingly.
3. Notify ESA pvv developers and current data preparers of the impending change and negotiate a reasonable implementation plan on a case-by-case basis.
4. Forward the final report of the ARCHIVE_STATUS working group to the PDS Tracking Requirements Working Group.