Release Notes v. 0.13.4-6-osf

This software release introduces a set of new features and performance improvements with respect to the previous open source distribution (version 0.12.5-7-osf).

Important notes

- ***New data storage architecture:*** DHuS 0.13.4-6-osf introduces in the Data Hub System a "Datastore service" function able to interface with:
  - *File system*
  - *OpenStack Object storage*

  DHuS is therefore able to use such kind of storages for the data archiving function

- ***New Open Web Component:*** DHuS 0.13.4-6-osf includes a new GUI (OWC) based on the Polymer library. OWC is mobile compatible and it includes some extra functions, like calendar view (showing the number of published products per sensing day). This new feature is designed for the open source framework users, which are now able to customize the Data Hub style as they like the most and to create and integrate their own web components.

- ***Catalogue extraction API:*** DHuS 0.13.4-6-osf introduces a capability to extract the data catalogue in compact format with a single customizable query

What's new?

 Mission related features

Sentinel-2 :

- Tile Identifier extraction and indexing at ingestion time
- New sorting method: "datatake" and "tile ID"
- Ingestion capability for Sentinel 2A L2A in COMPACT format (see S2-PDGS-TAS-DI-PSD Sentinel-2 Products Specification Document, Issue 13.2 and Issue 14.0)

Sentinel-3

- Introduction of dedicated algorithm to generate OLCI and SLSTR product quicklook

Data store

New data storage architecture

Introduction of Datastore service function able to interface with:
- Block storages (local or remote file system)
- OpenStack Object storage containers (through OpenStack Swift HTTP interface)

Standard UI features

New features for users:

- Link to download TCI images for S2A COMPACT format products
- Improvement in the shape file feature precision
- Polygon selection on Map

New features for administrators:

- Terms and conditions link in the registration page
- Configurable pagination limit in AJS

OWC UI features

New features for users:

- Possibility to select a list of metadata to expose in the product list
- Cart
- Saved Searches
- Advanced search (beta version)

New features for administrators:

- Management panels
- Map Servers configuration panel

API features

OData API

- Possibility to retrieve metadata of deleted and evicted products (this function is not retroactive)
- Catalogue view: Compact output format (CSV) for the OData query output

Functionality improvement	*Synchronizer updates:* • Synchronization of products covering a defined Geographical AOI • Product synchronizers optimization: product download via multiple threads
Interface changes	• Removal of Metalink parameter form OData entity Products • New log messages in case of STOP action on FileScanner

Bug Fixes and Implementations

Here follows the list of bug fixes and implementations released:

Mission related features	*Sentinel-3:* • Fix for missing footprint on SRAL new product type: SR_1_SRA_A_ and SR_1_SRA_BS • Fix for mirroring transformation affecting S3A SLSTR ascending images • Fix for SLSTR quicklook sometimes generated in grey or encountering quicklook generation issues
UI features fixes	*Fixes for users:* • Search box: solution for issue with Mozilla Firefox v52.0 • Introduce control for forgot password process via GUI for non-existent user *Fixes for administrators:* • OWC Product footprints default color • OWC prototypes: Auxiliary Data Files manager • Validation of email format in the registration form in the standard UI: the creation of user accounts with malformed e-mail is forbidden

API features fixes	_Solr service_ • OpenSearch orderby is now not case sensitive _OData service_ • Introduction of OData filter _tolower_ functionality in Users entity
Functionality improvement	_Queries response performance_ • Optimization of the $expand filter • Indexing of "ingestion date", "creation date" and "product identifier" metadata to improve response time when filtering by the mentioned metadata _OData Synchronizer_ • Change sorting criteria used by User Synchronizers: User creation date • Change sorting criteria used by Product Synchronizers: product creation date • Solution of issue causing synchronization gaps in OData Product synchronizers

Known issues and limitations:

■ _Creation of file (.lobs) in hsqldb directory containing metadata and checksum of deleted and evicted products_

■ _Incomplete S1A WV product footprints extraction_

■ _S3 SLSTR SL_1_RBT__ quicklook generated by DHuS are sometimes shorter than the original data (this issue is not systematic)_

■ _S3 SR_1_SRA_A_ and SR_1_SRA_BS product inspection functionality unavailable_

■ _Slow Product Nodes inspection in Openstack_

■ _Installation process more time consuming than usual: the duration of the first start will be proportional to the amount of data stored in DB/SolR in DHuS DB_