XML Pipeline workflow
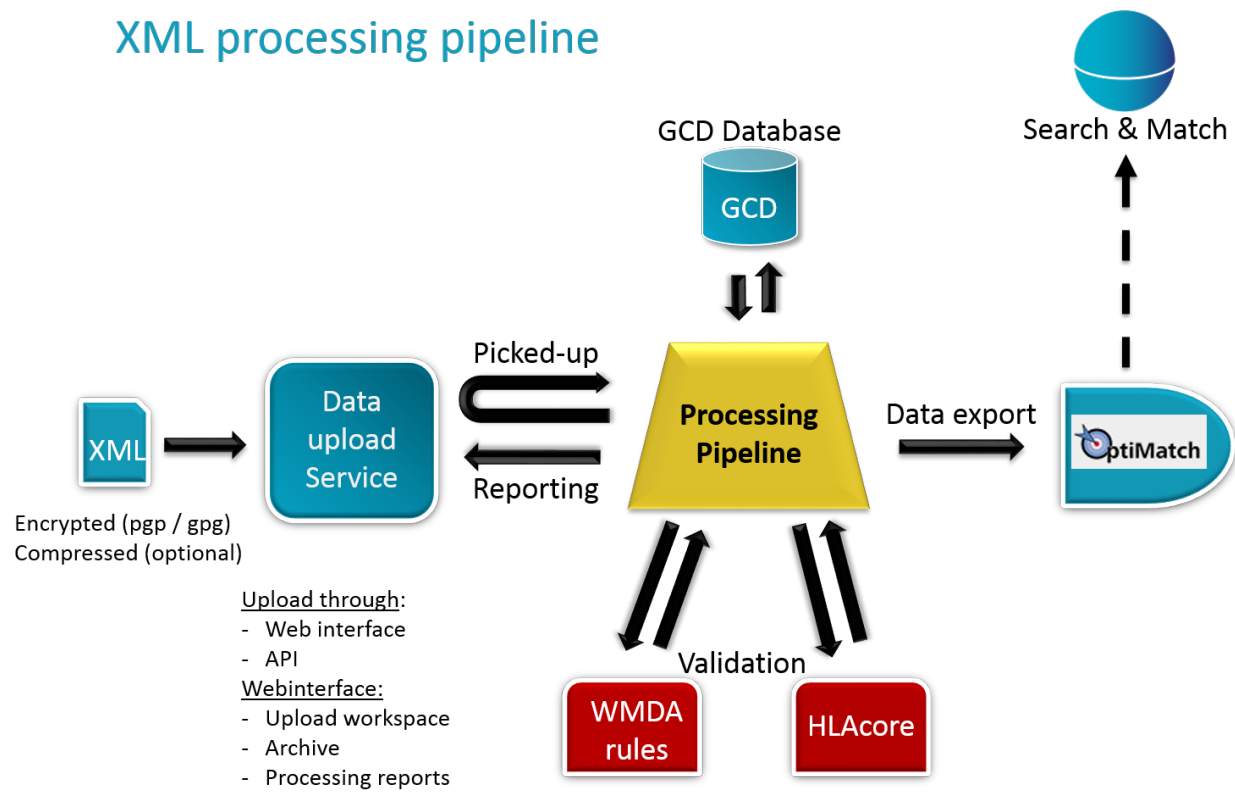
Legacy pipe with OptiMatch
OptiMatch is terminated on 31st, 2022

XML processing pipeline

GCD Database

GCD

Search & Match

Picked-up

Processing
Pipeline

Data export

OptiMatch

Data
upload
Service

Reporting

XML

Encrypted (pgp / gpg)
Compressed (optional)

<u>Upload through</u>:
- Web interface
- API
<u>Webinterface</u>:
- Upload workspace
- Archive
- Processing reports

Validation

WMDA
rules

HLAcore

Legacy pipe and new search & match

New Search & Match started from 1st, July, 2022

WMDA Services

External services

HLA
export

Hap-E

GCD

GCD
retriever

Materialized View

Search & Match

Pickup file

PIPE

Search
DB

XML

Data
Upload

Reporting

Encrypted(pgp/gpg)
Compressed (optional)

Upload file through
- Web interface
-API
Web interface:
- Upload workspace
- Archive
- Processing report

WMDA
rules

HLAcore

Isam lib
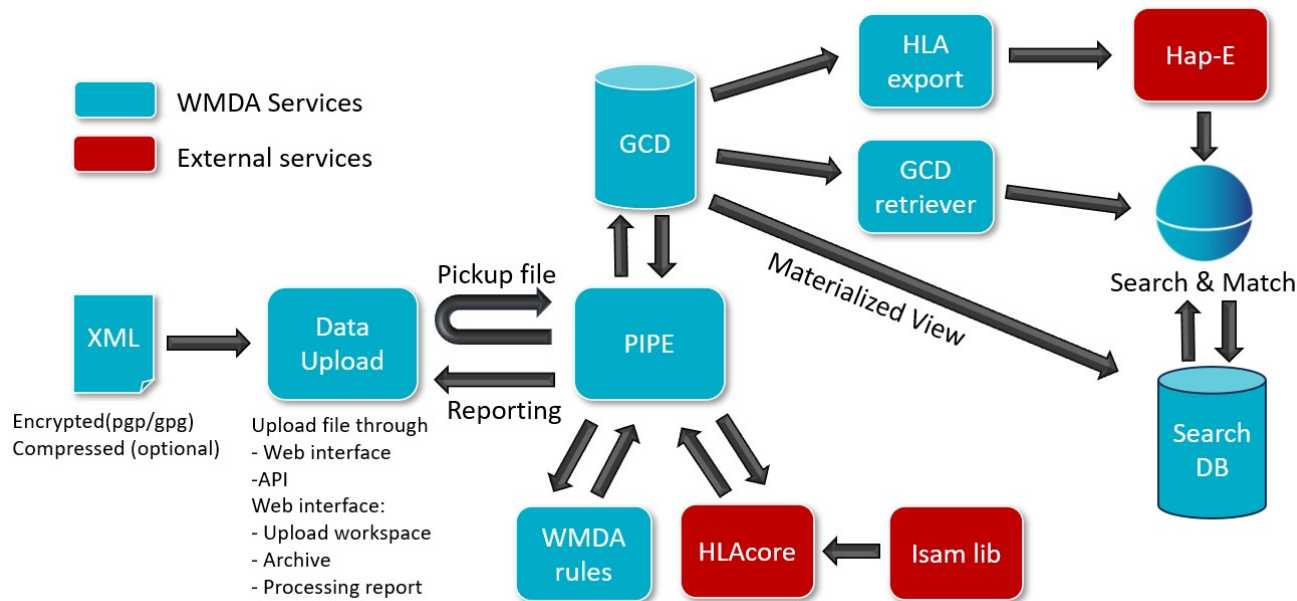
1. **Upload XML file** by user through manual upload or API connection to the data upload service
2. **Pick-up file:** The processing pipeline pick-up the file from the upload service Through API connection
3. **Validations:** Check file name
4. **Decrypt/ decompress:** Decrypt file and if necessary unzip file
5. **XML structure validation:** Check XML file structure based on XSD files
6. **File / Inventory validation:**

   -Check ION LISTING_ORGANIZATION and POOL and if LISTING_ORGANIZATION is allowed to send for POOL (affiliated organisations)
   -CONTENT_TYPE vs file name and inventory type
   -UPDATE_MODE
   -SCHEMA_VERSION
   -CREATION_TME and SNAPSHOT_TIME
7. **Record validation:**

   -WMDA business rules: required fields
   -WMDA business rules: reject record status=DE; HIV=pos
   -HLA validation by HLA core through API call
   -WMDA business rules: minimal required HLA fields
   -WMDA business rules: optional fields or combination of optional fields
8. **Save records:**

   -Save valid records in database (GCD)
   -End of processing: check number valid records with number of records previously saved in database: if new number is 90% of the previously saved number of records -> replace previous records by new records from this POOL.
9. **Create report:**

   -Create report from records in database with warnings and rejections specified, total numbers of accepted, rejected, warnings
   -Export report to data upload service through API connection
10. **Create export file:**

    -Create export CSV file if no processing of files/records is running (once a day)
    -Compress file
    -Encrypt file
    -Export file to data upload service through API connection