

Legacy pipe with OptiMatch
OptiMatch is terminated on 31st, 2022

XML processing pipeline

```
graph LR; XML[XML] -- "Encrypted (pgp / gpg)  
Compressed (optional)" --> Upload[Data upload Service]; Upload -- "Picked-up" --> Pipeline[Processing Pipeline]; Pipeline -- "Reporting" --> Upload; Pipeline <-->|Validation| WMDA[WMDA rules]; Pipeline <-->|Validation| HLAcore[HLAcore]; Pipeline <--> GCD[(GCD Database)]; Pipeline -- "Data export" --> OptiMatch[OptiMatch]; OptiMatch -.-> Search[Search & Match];
```

The diagram illustrates the XML processing pipeline. It begins with an XML input (represented by a blue square with 'XML') which is encrypted (pgp / gpg) and optionally compressed. This input is sent to the Data upload Service (a blue rounded rectangle). The Data upload Service then picks up the data and sends it to the Processing Pipeline (a yellow trapezoid). The Processing Pipeline reports back to the Data upload Service. The Processing Pipeline also interacts with the GCD Database (a blue cylinder) and the Validation module (a red rounded rectangle) via bidirectional arrows. The Validation module is further connected to WMDA rules (a red rounded rectangle) and HLAcore (a red rounded rectangle). Finally, the Processing Pipeline exports the data to the OptiMatch module (a blue rounded rectangle with a target icon). The OptiMatch module then performs a Search & Match operation, indicated by a dashed arrow pointing to a blue sphere.

XML

Encrypted (pgp / gpg)
Compressed (optional)

Data upload Service

Picked-up

Reporting

Processing Pipeline

GCD Database

GCD

Validation

WMDA rules

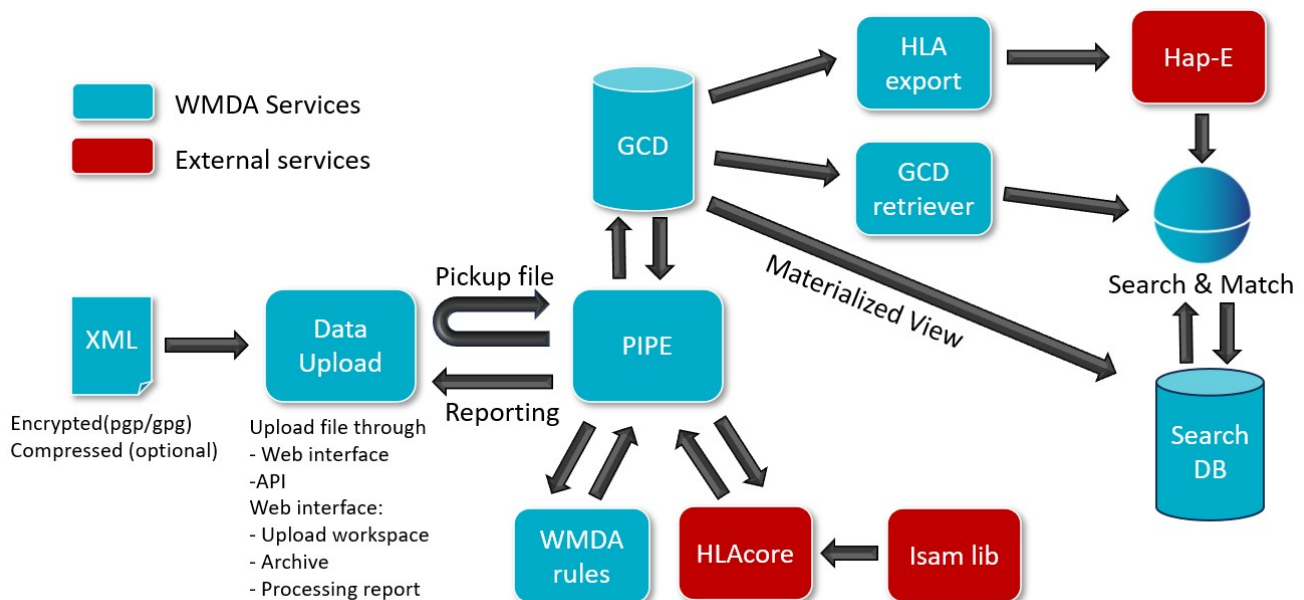
HLAcore

Data export

OptiMatch

Search & Match

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



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