Slice 3

Hivilake refactoring - Framework for extention

Le Nhu Chu Hiep

- 1 Difficulty in Implementing
- 2 Re-design

Section 1

Difficulty in Implementing

Implement old design

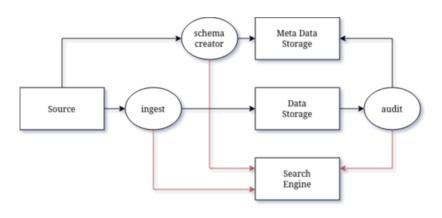


Figure 1: Datalake Processing

Hard refactor time

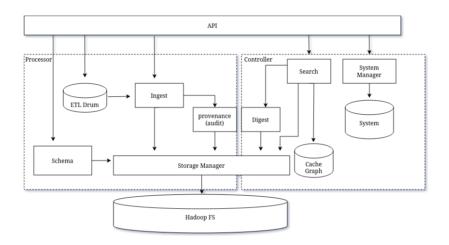
```
86202d93135214b95d37516304631 (HEAD -> master, origin/master) LH : [FIX] refactor doc for easier structural reading
    Dee98caa9d5566bfb91b6b1ef9550f71e72 LH
                                                 final commit file before merge to master
      49542bda2a7214584d801ac966520f55e LH
                                             :[FIN](refactor) build common-hadoop and refactor process package using common-hadoop
        d98f827a9cc4916c477b594a9cc1e7 LH
                                             : [WIP](refactor) rewrite ingest using storage class
       49f1df1a750f4a5eda1d4e0035e763a LH
                                                [WIP](refactor) build basic functional class for handling hadoop access
 ed7b0bd332cea891d85c5a8864e4a51a31af5d LH
                                             : [WIP](refactor) developing storage class for handling storage access
                                                [WIP](refactor) create module for hadoop access handler
db3f378e907aad8453ddcf9a6d6e55b92bbd801 LH
                                                [WIP](refactor) add XML dependency to local pom and remove orphans in global pom
e2886a10082d7d9202ed0b72ab42e1e91ce8e86 LH
                                                [WIP](refactor) replace old DOM w3c parser by XMLParser + JAXB
                                              :(XML Model) build schema object model for SOF file
77668190b78bfbe9cd82d46f89ef46679aa2f91 LH
                                               [WIP] build xml parser for better work with xml file
 48bdb56e4bbf02e302803f5faf9f8f2c09ad9f LH
a5315b63ac27ac004e8bba881d4a7de3d69ba84 LH
                                              : [FIX](CRUD func of metadata) change insert mechanism
 db6a6eeac98ffe8b648a90500b16162001ca02 LH
                                                implement CRUD func for delta metadata table
f23c8b76f3d465b36d3830599124d86bb4918fa LH
                                               : [WIP] wrap DeltaTable for easier process
abbe918566731e35e0c587ba1ec37677178c95e LH
                                              : add new source for delta table doc
d14ff36d2a58a3bc0cce17925fe208919f8959c
                                                [WIP] func update table
```

Figure 2: Refactor Time

Section 2

Re-design

Re-design



Key Constrain

- The class should implement a really needed interface only.
- 2 The class inherit is preferred than a new class.
- A interface should only include a limited properties following its name.
- SM should has its own pre-define set of exception and interface raise them only.

Key Constrain

- A good and detail document is necessary for both class, interface and exception.
- The number of interfaces should not be obstacle, if the storage system has a new properties can not merge to any exist interfaces, then it deserves a new one.
- The interface should be the only road to communicate with SM.
- Each SM should provide a unique factory class.

New Design Expected of SM

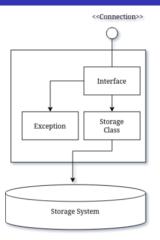


Figure 4: Detail System Manager Diagram