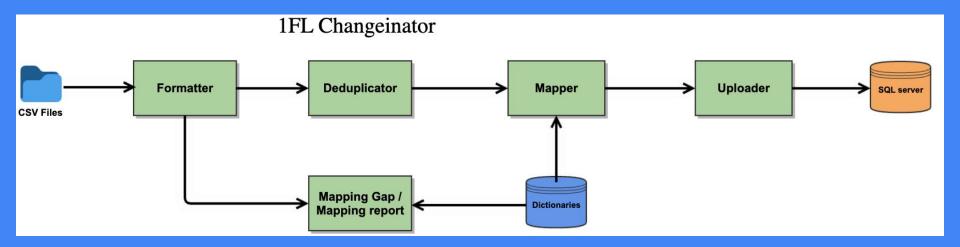
1FL Changeinator

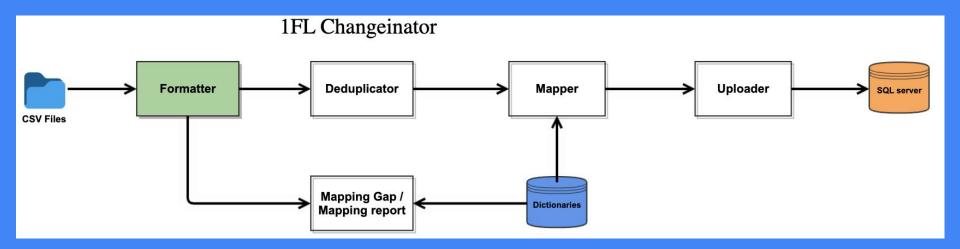
Presented by: Ali Nouina



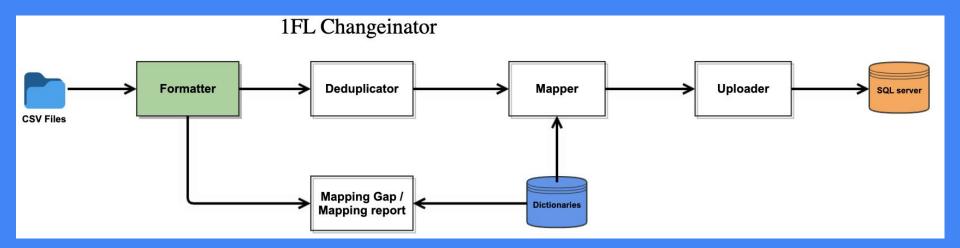
- 5 main components
- Can all be ran at once, combination, or individually
- Runs on the pyspark cluster

```
onefl converter.py
common/
----> commonFunctions.py
----> spark secrets.py
----> settings.py
mapping scripts/
----> demographic_mapper.py
----> encounter mapper.py
----> .....
----> ....
```

```
partners/
----> partner 1
----> dictionaries.py
----> formatter scripts/
----->demographic_formatter.py
----->encounter formatter.py
-----> .....
-----> ....
-----> data/
----> formatter_output/
----> deduplicator output
-----> mapper output
-----> mapping_gap_output/
----> partner 2
```



- Reads from the input directory
- Converts input data to a standard PCORnet format
- Each table have its own formatter
- Each partners has its own set of formatters



Input directory: -d [/path/to/data/parent/folder/]

Partner : -p [partner_name]

Job :-j format

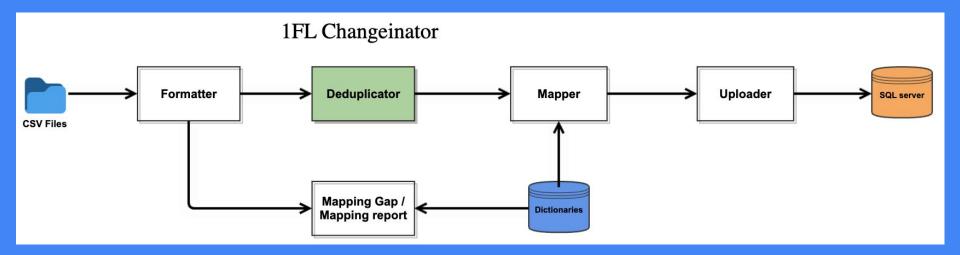
Folder : -f [folder_name]Table : -t [table_name]

Example 1: Format the demographic and encounter tables:

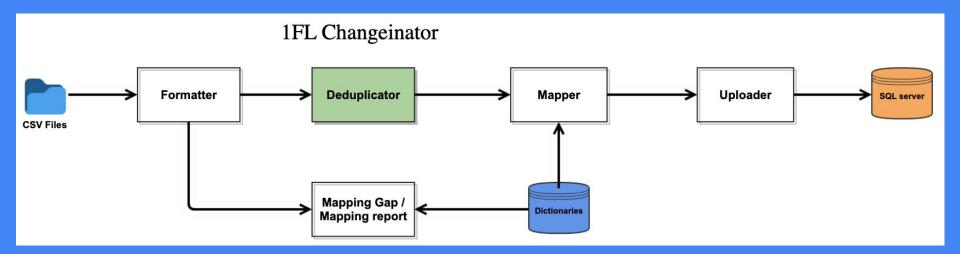
cluster run -a -d [/path/to/data/parent/folder/] -- onefl_converter.py -p partner_a -j format -t demographic encounter -f folder_1

Example 2: Format all the tables:

cluster run -a -d [/path/to/data/parent/folder/] -- onefl_converter.py -p partner_a -j format -t all -f folder_1



- Reads from the formatter output
- Removes duplicates id from the formatted data



Partner : -p [partner_name]
Job : -j deduplicate
Folder : -f [folder_name]
Table : -t [table_name]

Example 1: Deduplicate the demographic and encounter tables:

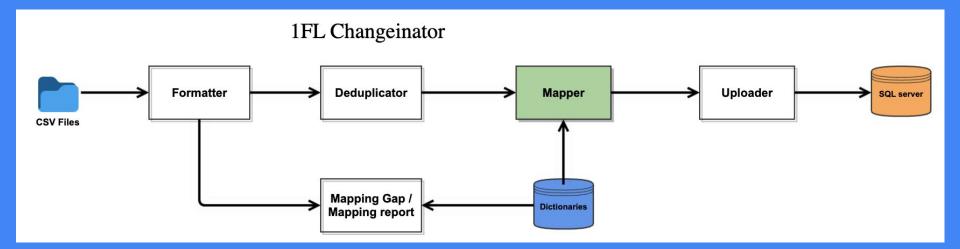
cluster run -a -- onefl_converter.py -p partner_a -j deduplicate -t demographic encounter -f folder_1

Example 2: deduplicate all the tables:

cluster run -a -- onefl_converter.py -p partner_a -j deduplicate -t all -f folder_1

1FL Changeinator Deduplicator Mapper Uploader SQL server Mapping Gap / Mapping report Dictionaries

- Reads from the deduplicator output
- Uses the partner custom dictionaries to map the deduplicated data



Partner : -p [partner_name]

• Job :-j map

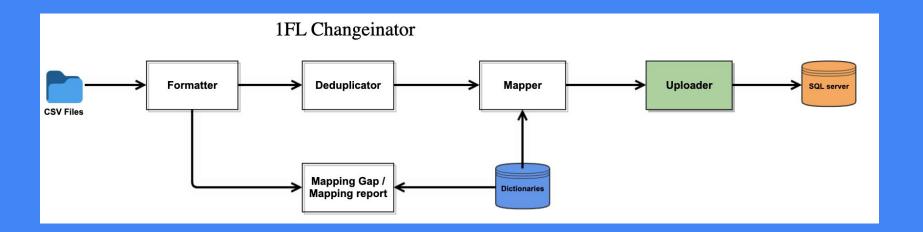
Folder : -f [folder_name]Table : -t [table_name]

Example 1: Map the demographic and encounter tables:

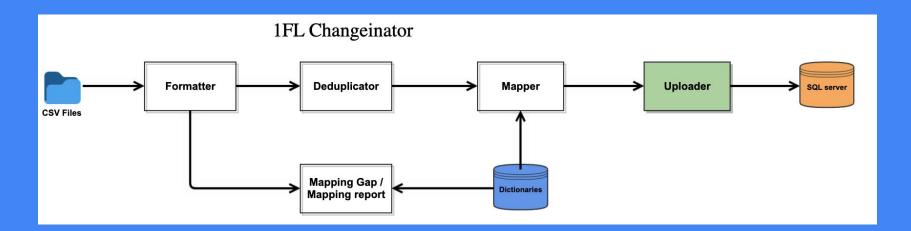
cluster run -a -- onefl_converter.py -p partner_a -j map -t demographic encounter -f folder_1

Example 2: Map all the tables:

cluster run -a -- onefl_converter.py -p partner_a -j map -t all -f folder_1



- Reads from the mapper output
- Upload the mapped data to the SQL database



Partner : -p [partner_name]

• Job :-j upload

Folder : -f [folder_name]Table : -t [table_name]Database name: -db [db_name]

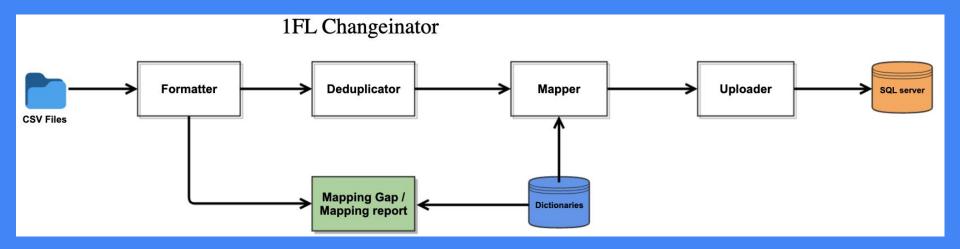
• Database server: -s [server_name]

Example 1: Deduplicate the demographic and encounter tables:

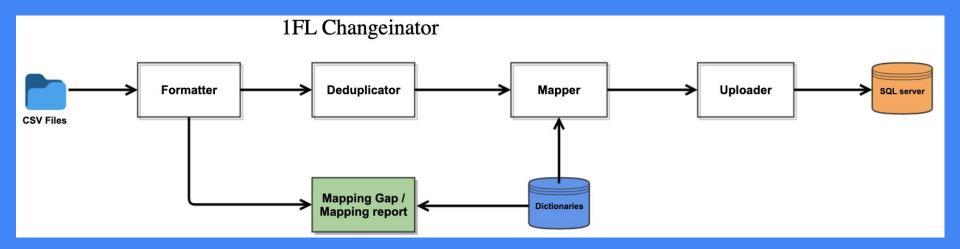
cluster run -a -- onefl_converter.py -p partner_a -j upload -t demographic encounter -f folder_1 -db [db_name] -s [server_name]

Example 2: deduplicate all the tables:

cluster run -a -- onefl_converter.py -p partner_a -j upload -t all -f folder_1 -db [db_name] -s [server_name]



- Reads from the formatter output
- Compares the data to the existing dictionaries
- Create reports of any existing mapping gap between the input data and the dictionaries



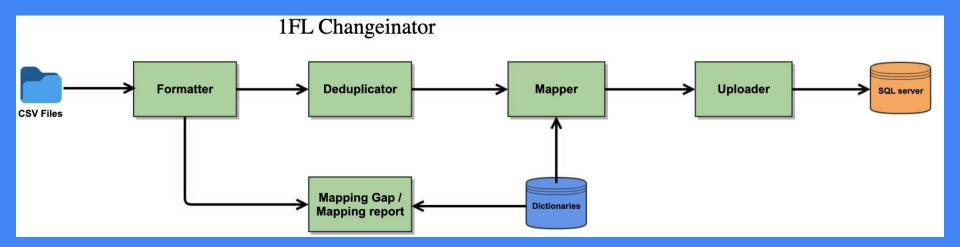
Partner : -p [partner_name]
Job : -j mapping_gap
Folder : -f [folder_name]
Table : -t [table_name]

Example 1: Mapping gap for the demographic and encounter tables:

cluster run -a -- onefl_converter.py -p partner_a -j mapping_gap -t demographic encounter -f folder_1

Example 2: Mapping gap for all the tables:

cluster run -a -- onefl_converter.py -p partner_a -j mappin_gap -t all -f folder_1



Input directory: -d [/path/to/data/parent/folder/]

• Partner :-p [partner_name]

• Job :-j **all**

Folder : -f [folder_name]
Table : -t [table_name]
db name : -db [db_name]
Server name : -s [server_name]

Example: run all the jobs at once:

```
cluster run -a -d [/path/to/data/parent/folder/] -- onefl_converter.py -p partner_a -j all -t all -f folder_1 -db [db_name] -s [server_name]
```

Thank you!!

- Questions?

Github:

https://github.com/uf-hobi-informatics-lab/converter_2_0