

# DFS TD - Synthesis Lab

Specific technical documentation for the Synthesis Lab tests

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## ELN data

Many files are extracted from Electronic Laboratory Notebook (ELN) which is responsible to gather many lab documents and result tests. It gives scientists a common view of data across disparate research areas, enabling complete visibility of research information.

## Raw data

Raw data files are extracted for the filtration equipments. The files are available on google drive or on the lab servers. Raw data files structure is different for each scale. Therefore, the parsing of the raw data files and the computations for each scale are handled by different python scripts. This process and files are described in detail on each equipment page.

Raw data files for all labs are extracted from the servers or gdrive folders presented in the following spreadsheet: [Asset Tag Spreadsheet](#)

## Talend jobs

Data is processed using Talend and Python. Talend jobs regarding Application Lab can be found in the Talend project **Rnl\_Silica\_Synthesis**

Job **F000\_Orch\_Flow\_Synthesis** is the orchestrator and will call successively all the other jobs a determined order.

## ELN Data Talend jobs

- **F001\_ELN\_Synthesis\_Get\_XML\_ELN**
  - extracts spreadsheets from ELN that were added or modified in the last 24h as .zip archives. The .xml files are extracted by using four successive API calls. For details on this process see: [https://drive.google.com/drive/folders/1BTlmyW\\_DoTPp12bpKzCNp9I4BF3K-oCD](https://drive.google.com/drive/folders/1BTlmyW_DoTPp12bpKzCNp9I4BF3K-oCD)
  - The ELN folders are defined in the file: ...\\DATA\\[ENV]\\Rn\\Silica\\Input\\Synthesis\\ELNsubFolder.csv



The **Po2 project** will need to change only the defined folders in the file above in order to get the right ELN data

## Python scripts

A copy of the Python scripts for downloading, parsing and computing new fields and columns for the Application Lab raw data and ELN data can be found here:

However it's recommended to get the last version of the scripts available in the production path: D:\DATA\PROD\Rn\Silica\Permanent. For the moment, **git is not in place for this project.**