

A standard ETL process from REDCap to OMOP

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INTRO:

- Building an ETL process towards the CDM is a resource-consuming task
- REDCap is a worldwide used web application to manage and build eCRFs for nonprofit research studies and registries
- Aim: leverage REDCap data structure to build a configurable ETL procedure that can be adapted to different studies.

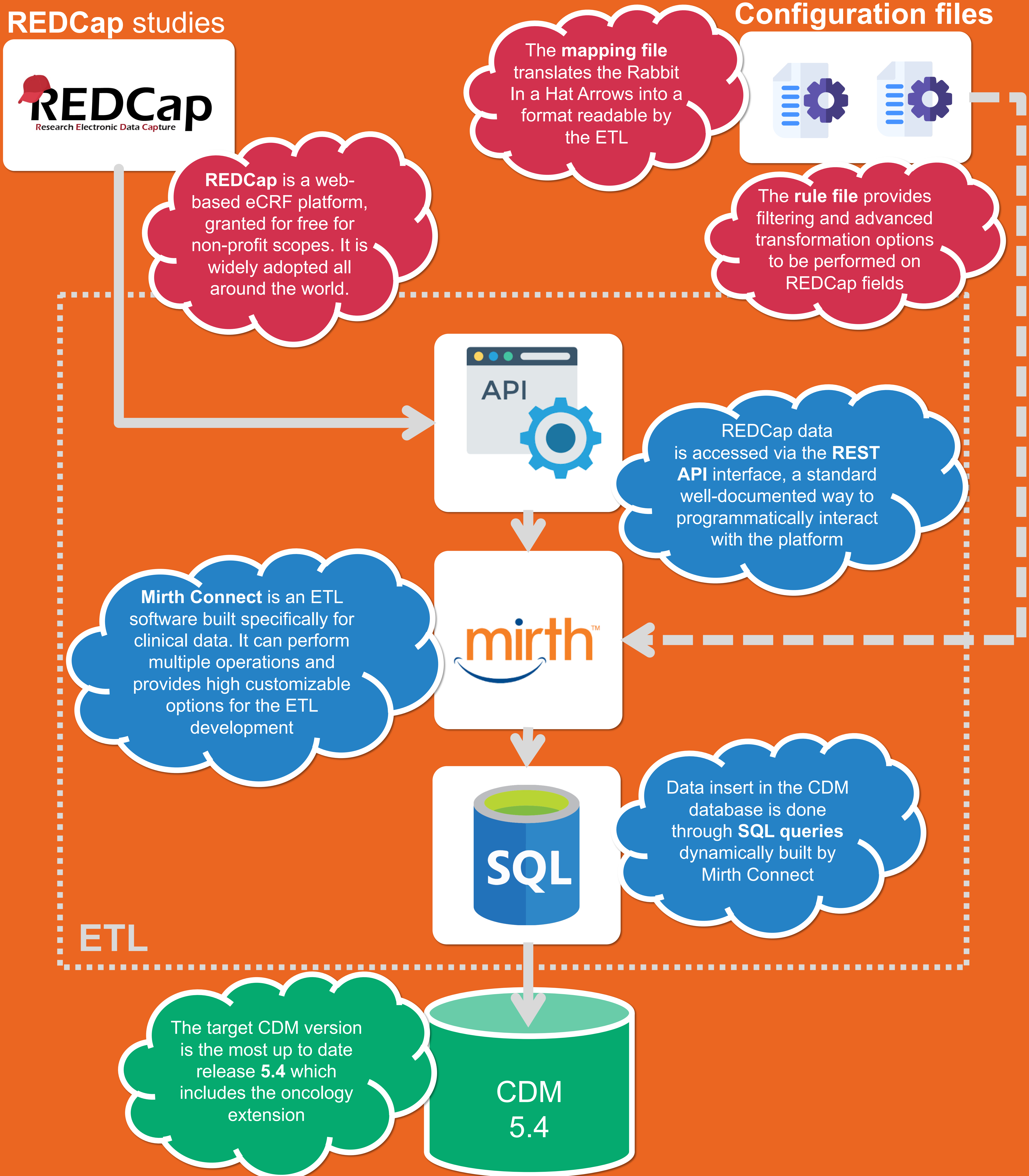
METHODS

- ETL process working with a fixed procedural component and a study-specific configuration component
- Mirth Connect, the ETL software to implement the procedural component through its Javascript interface
- Two configuration files that provide the mapping between the information in the REDCap and OMOP CDM and the filtering/transformation procedures that need to be performed on the data

RESULTS

- Feature specific tests carried out in an environment that simulates a REDCap project
- Each basic functionality has been evaluated

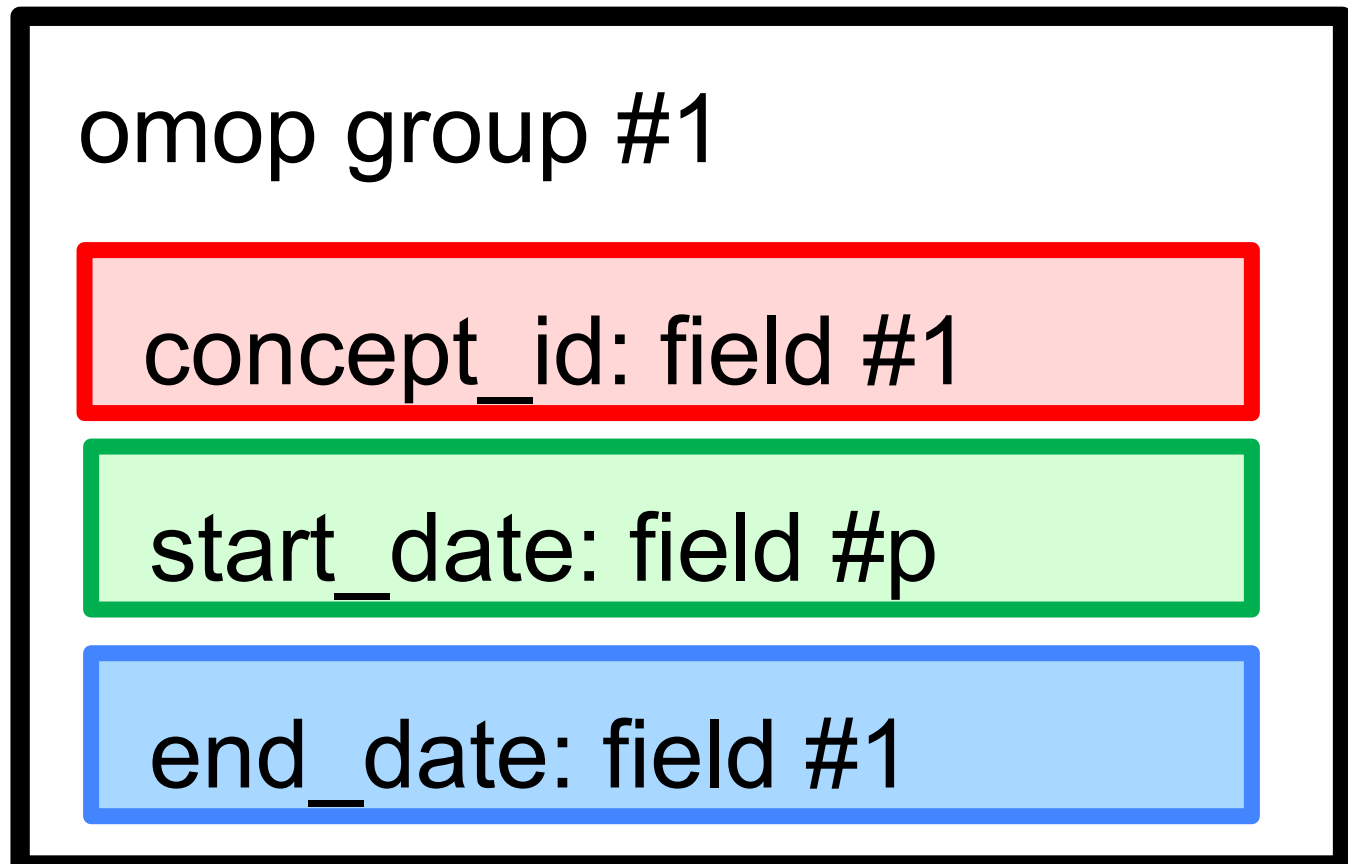
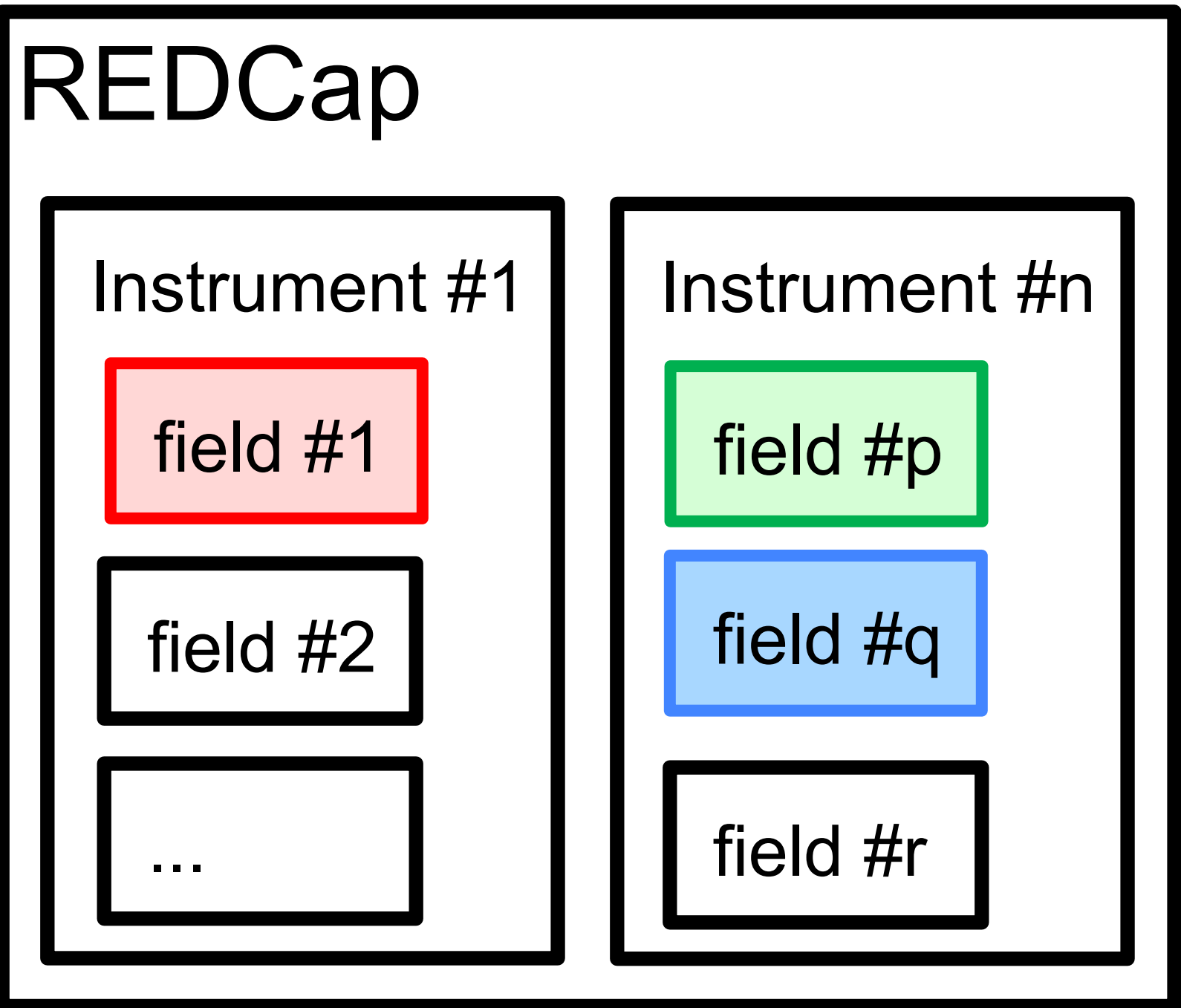
REDCAP → OMOP



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How to build the mapping file

- groups are collection of REDCap fields
- 3 types of groups: **person**, **visit** and **fact group**
- each field in REDCap that refers to a single “object” in OMOP link each **fact group** to a **visit group**
- translate** the grouping logic into a csv table



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