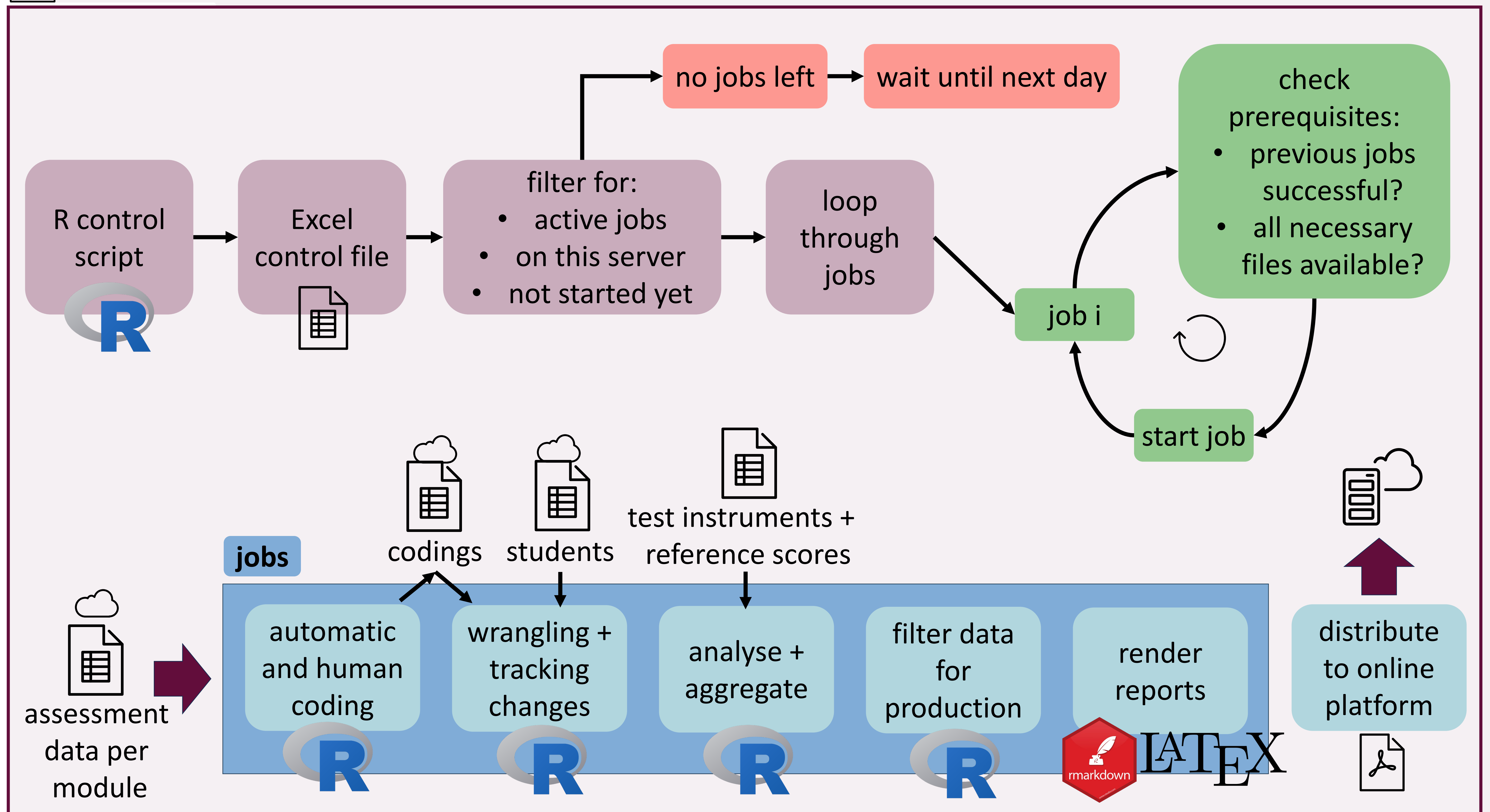


Producing Feedback Reports to Austrian Schools in (Almost) Real Time

Gabriele von Eichhorn, Elisabeth Rothe, Moritz Friedrich & Roman Freunberger

 daily automatism on 7 servers



Context

Educational National Large-Scale Assessment in Austria: 3rd, 4th, 7th and 8th graders are obligated to take a yearly assessment in Reading, Maths and English Listening + Reading (only secondary school).

Challenge

Immediate feedback of test results is given on school, classroom and individual level for up to 25 obligatory and non-obligatory modules per study

Concept

- test instruments are pre-calibrated in a quality controlled representative sample beforehand
 - all data are batch processed every day
- only reports in which something has changed are produced
- jobs and generated reports are logged in a database for daily monitoring purposes
- PDFs are synchronized to database, matched to users by file name and distributed via an online platform

Implementation (see workflow graphic)

- automatic daily exports from 3 online platforms
- Excel control file for workload management
- set of programmed prerequisites for every job
- data wrangling in R and tracking changes with compareDF
- reporting in .rmd and .tex for student reports (because it's faster!)

Learnings

- testing is important!
- error handling can save you (break loudly and clearly)
- have somebody else write (good) specifications for you content-wise and test them
- don't underestimate debugging and monitoring
 - version control can and will save you

