A cloud infrastructure for R reports

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The poster shows an annotated but mainly visual and rather technical overview of the infrastructure used at rappper.net to generate reproducible statistical reports in a web application building on the power of R among other open-source projects.

Beside the replicated data stores (NoSQL databases and network drives), the problems of data conversion and the distributed back-end of R workers, the poster also concentrates on security issues like providing a Rails front-end, filtering user contributed R commands with sandboxR and evaluating all expressions in a RAppArmor-enforced temporary environment inside of rApache returning JSON – in short: presenting a successfull flowchart of open-source technologies after facing and resolving a variety of problems while creating R-driven web applications.

References


