Using R in the Statistical Office

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Statistics Austria

Introducing R

At first

- Started very “unofficial”
- Self installed R versions floating around in the office
- No support

First improvments

- Standardized R installation
- Specific units allowed to use R
- First R server

Support and policy

- Official support infrastructure (Jira) and responsible unit (Methods)
- RStudio on server and desktop
- Presentation of R projects (twice a year)

Infrastructure

- $\pm$ 40 weekly active users (over 100 installations)

Current situation

- Installation package for the Windows desktops including R, RStudio, Latex,SVN and RTools
- RStudio Server on a Linux (Ubuntu) server with 16 cores and 128 GB memory

Future

- No more desktop R
- RStudio Server Pro on a Linux machine as default client for everyone

Statistics Netherlands

Introducing R

Typical hurdles (2010):

- How to install FOSS?
- OMG everybody can write CODE now!

Approach

- Project with dedicated project leader
- Standardized 3 installation types geared to different user types.
- Set up code/documentation standards

Currently

- $\pm$ 200 users ($\pm$100 active)
- One single central installation
- Refer to tidy code/documentation standard

Support and policy

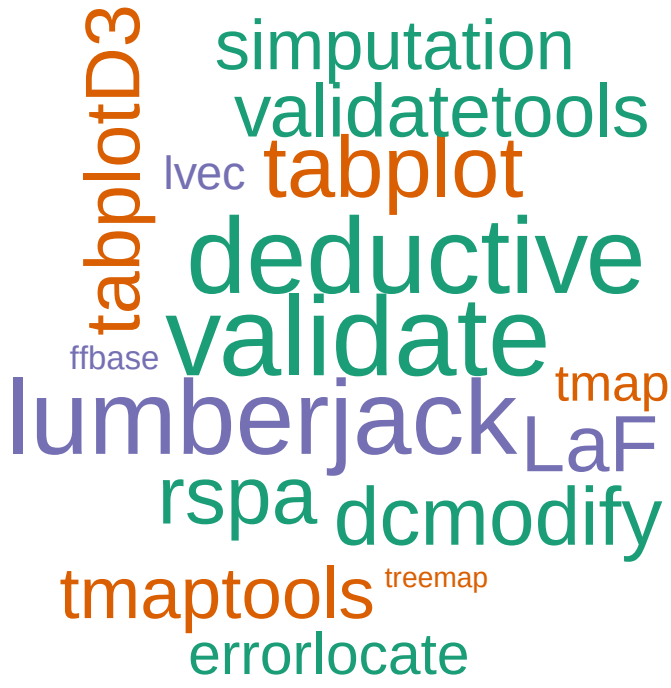
Local user group *kennR!*

- Beginner's course & advanced workshops
- User meetings & support
- Functional management

FOSS Contribution Policy (in short)

- When relevant to statistics Netherlands, with positive business case.

Packages contributed



- data cleaning
- visualisation
- infrastructure

Current infrastructure

- R + RStudio on central folder
  - R-engine usable by non-programmers who just run a script
  - Selection of R packages pre-installed
  - Full CRAN repo available internally (there's no direct internet access from most VM's)
- RDS server (8core, 64G VM's) for heavier work
- Working on connection to Spark server (Sparklyr)
- Looking into RStudio/Shiny server but little/no support experience for linux currently exists in SN.

General remarks

Lessons learned

- Central installation or server solution preferable
- Training courses are necessary
- Support is needed when the number of users grow
- internal CRAN mirror for IT security

Collaboration opportunities

- Packages can be easily shared
- Interface is unified by R
- Bottom-up approach much more efficient than defining everything beforehand
- Survival of the fittest vs. planned standard tools