

Protocols for administration of the analysis infrastructure

MOLGENIS developed standard protocols to handle server installations and deal with possible deviations in research setup in LifeCycle (R-protocols). The protocols we still use to set up servers and perform maintenance on the infrastructure are the following:

- [Armadillo/DataSHIELD](#) - installation protocol
 - [Armadillo – analysis documentation](#)
 - [Armadillo – data manager documentation](#)
- [RStudio installation protocol](#)
- [Security setup of the infrastructure](#)

Sharing analysis and version control

WP2 works closely with all other WPs to facilitate and document these protocols as part of the analysis server protocols. RStudio is fully integrated with Git (version control and a central place where we can work on our meta-analysis). In Git analysts are able to work together on one or more research projects.

- [Code sharing/R-protocols](#)
- [Common data model versioning](#)

Upgrade data harmonisation procedures

We have focussed on improving the technical procedures that facilitate, and may even partly automate, the data harmonization. We have provided YouTube training materials for users for cohort server upgrades (IT departments) and for changes to the data model, on the [MOLGENIS YouTube channel](#). We have also created various Standard Operation Procedures (SOPs):

- Expansion of the data model can now only take place through an R-package [dsUpload](#) describing adding new variables
- We developed formalized procedures to perform analysis using the [dsHelper](#) R-package