Link2GI - consistent linking of Open Source GIS with R

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The mature open source Geographic Information System (GIS) and Remote Sensing (RS) software like *QGIS*, *GRASS GIS* and *SAGA GIS* provide comprehensive and continually growing collections of highly sophisticated algorithms that are mostly fast, stable and usually well proofed by the community.

Although a number of *R* wrappers aim to bridge this gap (eg **rgrass7**, **RSAGA**, **RQGIS**), they are not that easy to setup for a smooth workflow if one has to work with restricted rights, parallel installations of the same GIS software or cross platform working environments.

The package **link2GI** provides a small framework for easy linking of *R* to major GIS software. Here, linking simply means to provide all necessary environment settings as well as full access to the command line APIs of these software tools.

The presentation of *link2gi* should serve as a basis for discussion to simplify and standardize the use of open source GI software from R. The aim is to establish a centrally maintainable, stable interface for the cross-platform efficient use of GI wrapper packages and command-line tools.