



## The JGrass Console

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Doing hydrological modeling requires appropriate and diverse tools. A database for storing the data and the model results, a GIS system for preparing and pre-processing the distributed data sets, a suitable set of tools for data analysis and a system for executing the models. The JGRASS console is an engine born for accomplish these tasks. It is primarily responsible for the execution of GRASS native based and of JGRASS Java based command. Besides it is also capable to execute OpenMI - Open Modelling Interface - compliant commands and some SQL commands. The console has the ability to execute one or many of the commands in a script file, formally known as batch-mode. Finally, its architecture is thought to be ready for including interface to the R statistical language.

The fact that JGRASS and GRASS, SQL and R are following their self-defined syntax and grammar definition - sometimes commonly referred to as model language - which have few in common, inspired to realize the console engine based upon the concept of a translator or more precisely of a language processor.

The JGrass console is going to be distributed with the JGrass GIS system, however it is actually a stand-alone environment that can be used as a workplace to launch OpenMI based (Java) hydrological models components, and integrate them in linked-at-runtime models.