A perl script for automated API bundle installations (SAGA)

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Abstract

Developing, testing and debugging of software packages before making them available for the production environment should be well tested on various testing platforms. Packages to be released in future, in this case an update made for the previous version, again are made bug-free and versatile to the changing environments and dependent packages. Above noted steps involved in software deployment of any software package often can be complex and is made short through automated build systems, and continuous integration frameworks. The best case however is to have a software deployment tool that automates every single step of deployment - developing, bug tracking and distribution. Present paper deals with a simple perl script (mephisto.pl) that automates build process of SAGA (Simple API for Grid Applications), a tool that can be generalized for any developing software package. The paper will also go through the working model of mephisto and discuss its future work to be able to develop it into a continuous integration tool and later serve as a software deployment tool for SAGA. The paper will also try to explore some of the existing software deployment tools such as NMI-GRIDS testing, NMI build and test lab, and automated building tools such as Buildbot to try to explain its standing with respect to the script being developed.