

GENIUS Grid Portal and robot certificates to perform phylogenetic analysis on large scale: an experience within the Italian LIBI project

Giuseppe La Rocca

INFN, Italy

This paper depicts the solution evaluated by INFN to allow users, not holding a personal certificate and therefore not belonging to a specific Virtual Organisation (VO), to access the grid via the GENIUS Grid portal enabled by a robot certificate. The robot certificate (also known as portal certificate), associated with a specific application that the user wants to share with the Grid community, have recently been introduced to perform automated tasks on Grids on behalf of users. They are extremely useful for example to automate grid service monitoring, data processing production, distributed data collection systems and others. In this work, robot certificates have been used to allow bioinformatics to perform phylogenetic analysis on large scale. The distributed environment set up in this work strongly simplify the access to the grid to occasion users and represents a valuable step forward to embrace a wide basin of users.