

GRASS GIS in grid environment

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UNOSAT is aiming for the creation of a web based user interface to GIS tools that are executed on a Grid environment. The software chosen to be assessed is a known GIS Open Source Software: Geographic Resources Analysis Support System (GRASS). This software is a hybrid and modular structured Geographic Information System (GIS) with both raster-oriented and vector-oriented functions. Different functionalities are being tested with the focus on disaster mitigation applications based on satellite imagery data. The web based interface will provide users with easy access to imagery analysis and map production tools that use data stored on a central database, as well as imagery requested by UNOSAT in response to emergency situations. This functionality will also allow developing nations to have access to basic GIS tools without having to worry about software licensing costs, computing power and storage capacity.