

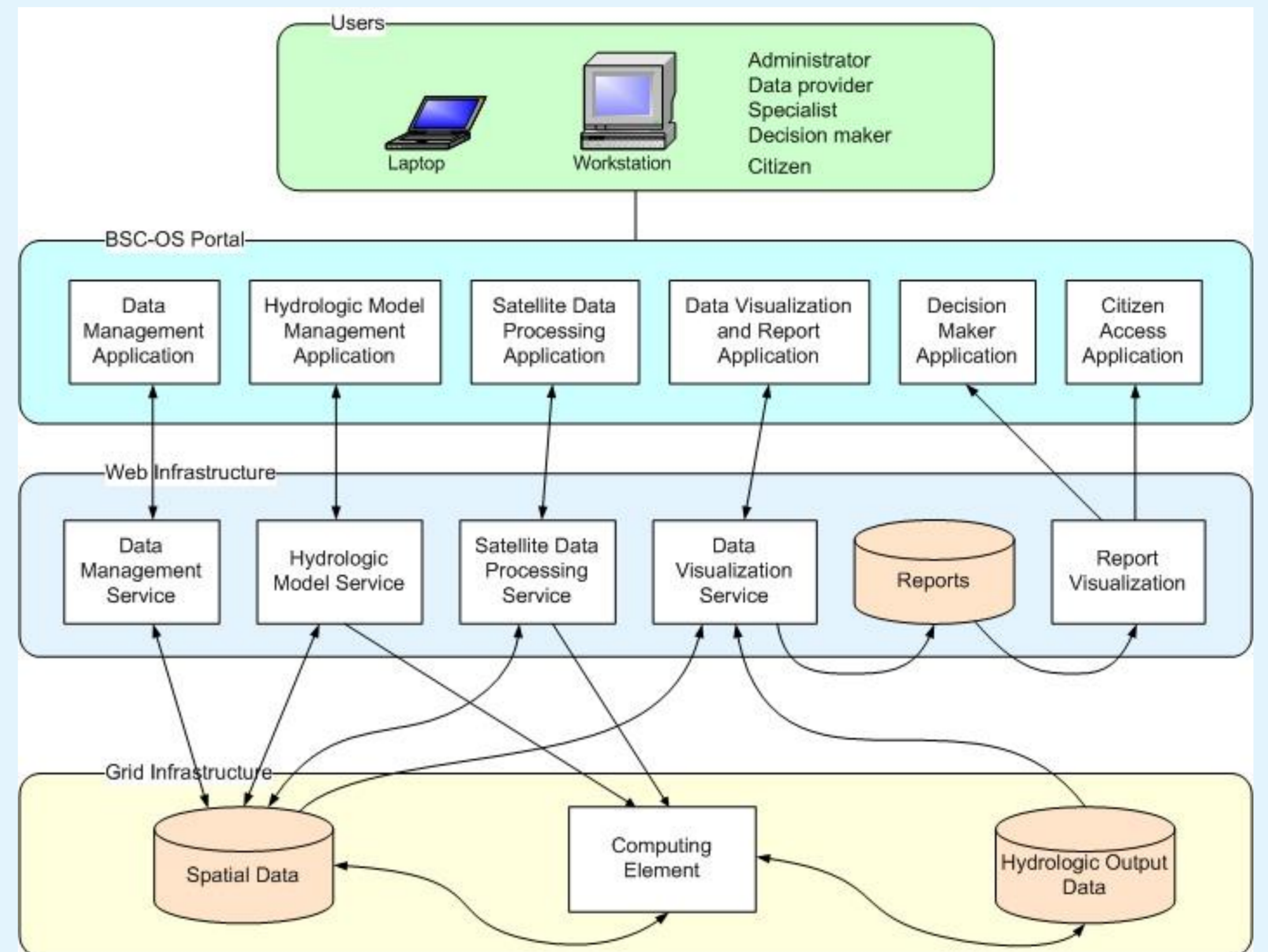
Environment Oriented Applications in enviroGRIDS Portal



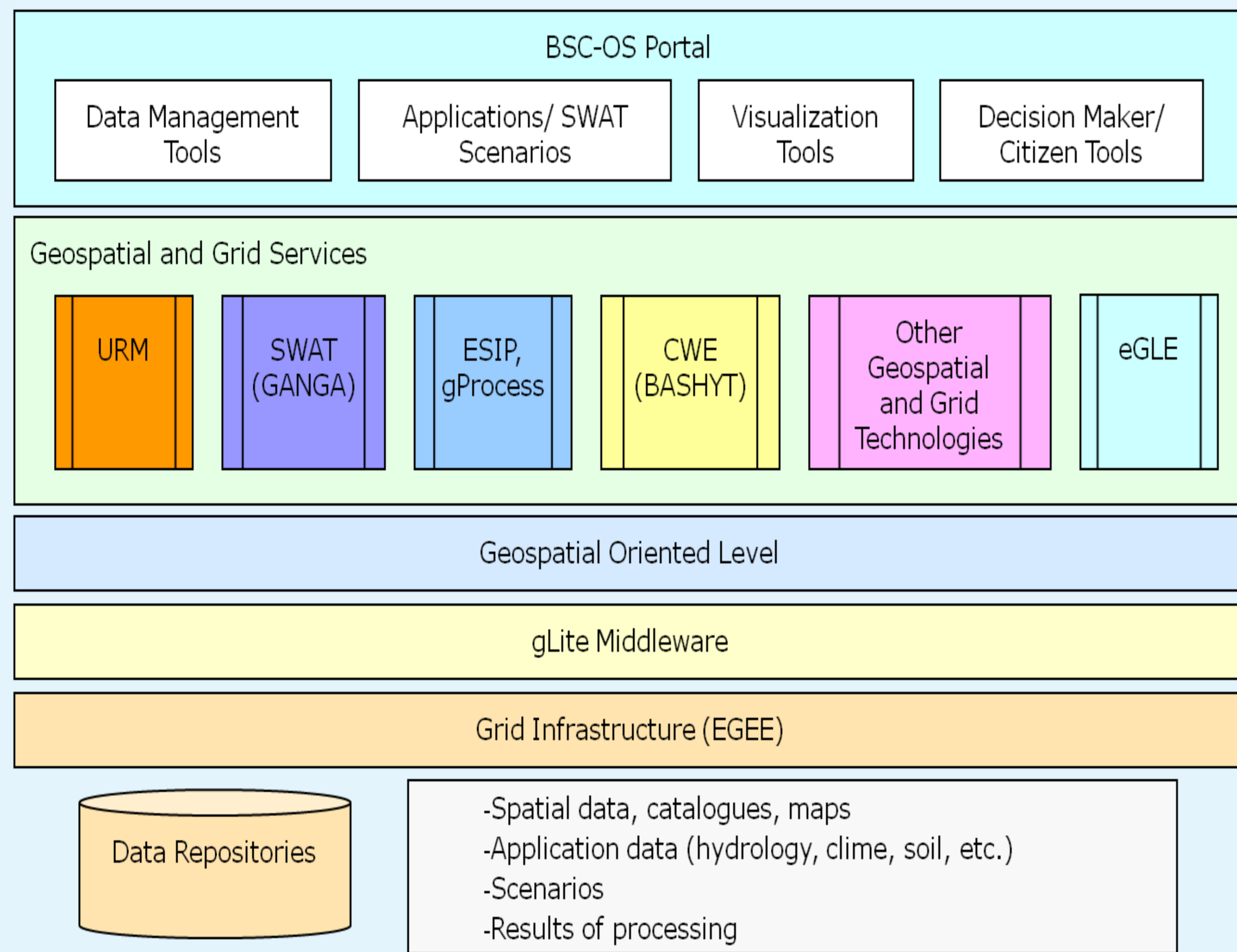
BSC-OS Portal Objectives

- To be the single way of the user to get into the enviroGRIDS system
- Exposes personalized tools for different category of users: data manager, earth science specialist, decision maker, citizen, and system administrator.
- Provide applications for:
 - data management
 - hydrologic models calibration and execution
 - satellite image processing
 - report generation and visualization
 - virtual training center
- Support interoperability between the Geospatial and Grid infrastructures on security, heterogeneous data access, distributed data processing
- EnviroGRIDS functionality gathers services provided by various technologies such as SWAT related modules, Collaborative Working Environment (CWE), Uniform Resource Management (URM), gProcess, ESIP, and eGLE platforms

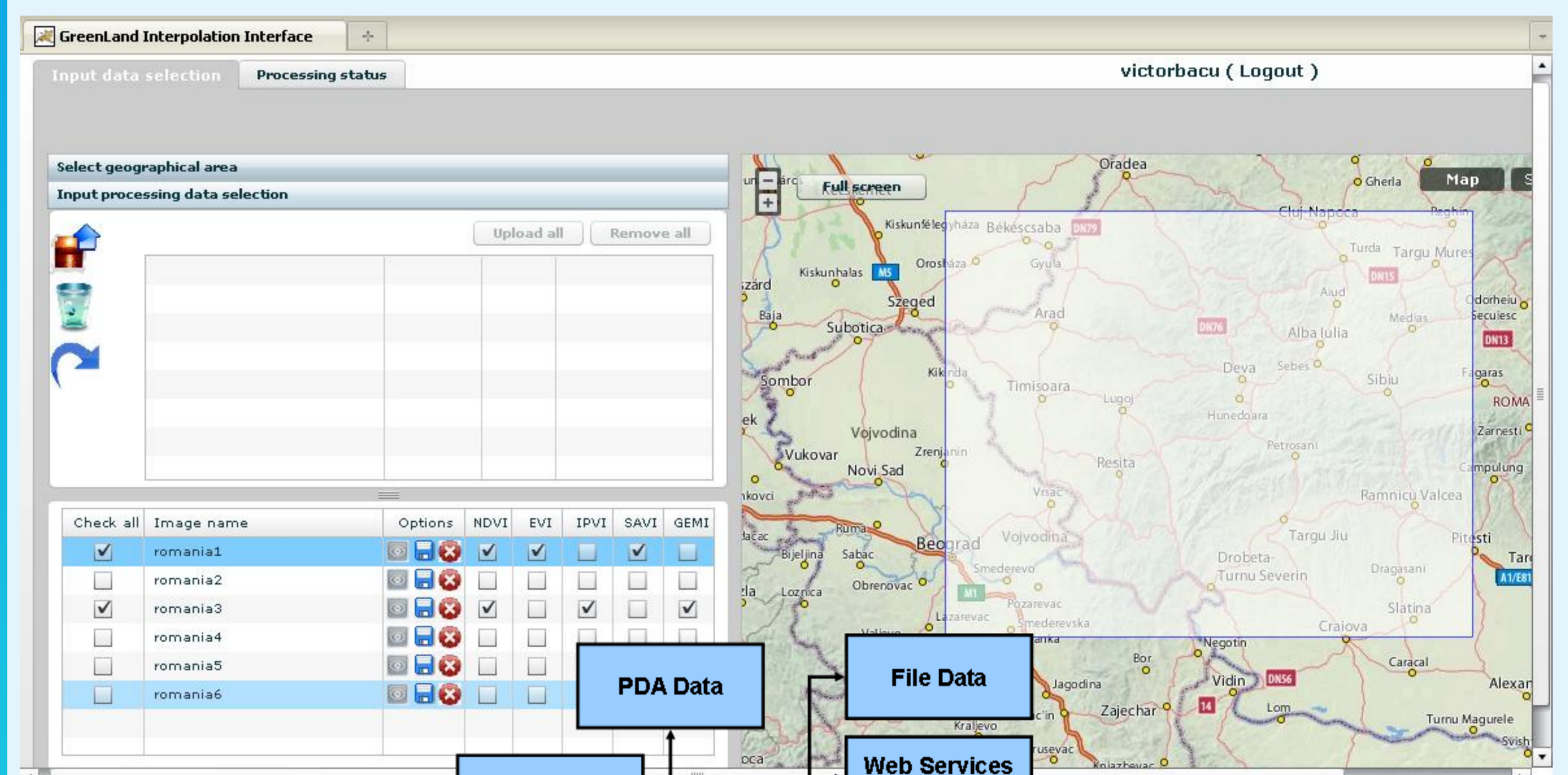
Data Flow Throughout the Portal



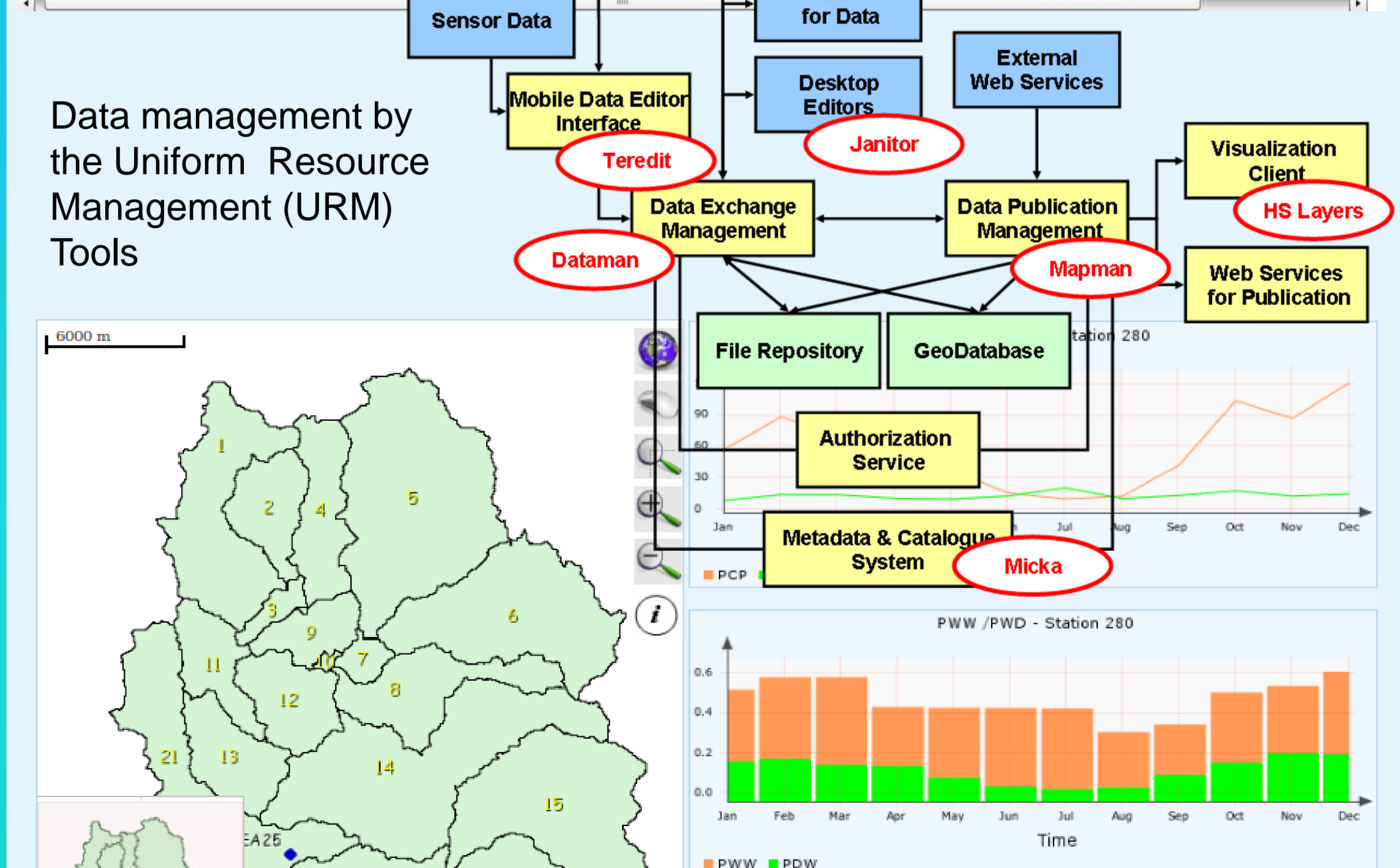
Portal Architecture



Satellite image processing by gProcess and ESIP based platforms:

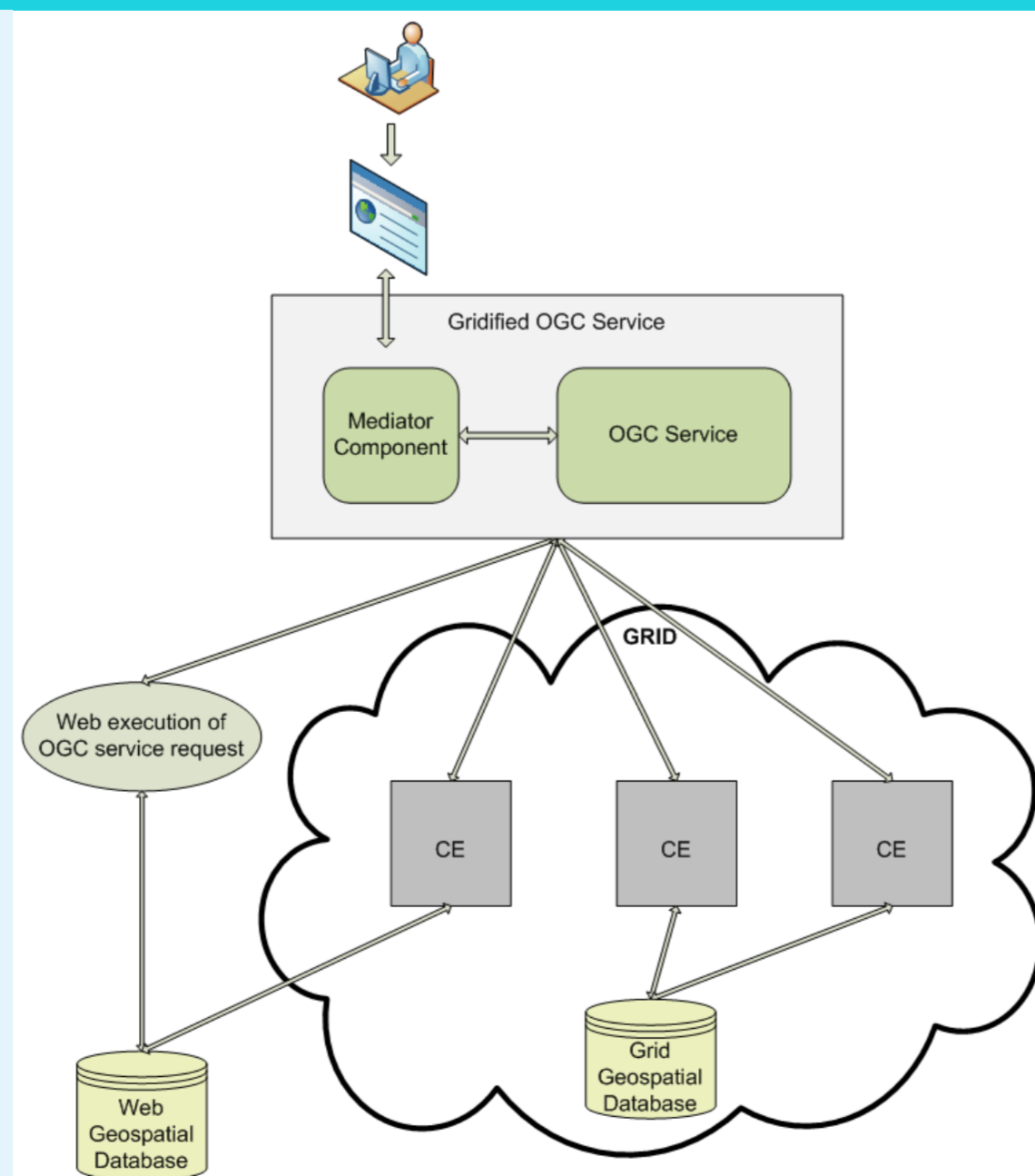


Data management by the Uniform Resource Management (URM) Tools



OGC-GRID Service Interoperability

- Interface – invocation HTTP vs. SOAP msg.
- Description – capabilities vs. WSDL
- Discovery – CS-W service vs. UDDI, MDS
- Communication – message, XML, GridFTP
- Security – user name, password, certificates
- State information – stateless vs. stateful



Report generation and Data visualization by BASHYT

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