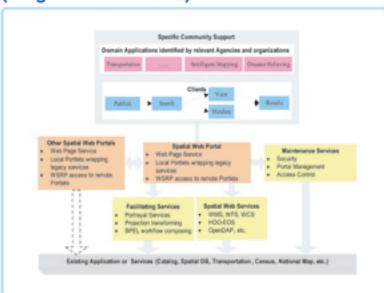
Intelligent Spatial Computing



Spatial Web Portal (SWP,eie.esipfed.org)

Leveraging both web portals and distributed geospatial information services, a SWP can support multiple levels of geospatial interoperability. We also develop the Earth Information Exchange (EIE) as an SWP to share Earth information at the levels of metadata, data, services and knowledge.

Architecture of SWP (Yang et al 2007 PE&RS)



SWP for EIE-Introduction

■ EIE: Earth Information Exchange

- Developed with the joint effort among NASA, ESIP, GMU
- Present data, products and services
- Integrated and timely exchange of earth science information
- Support applications of national and international interests



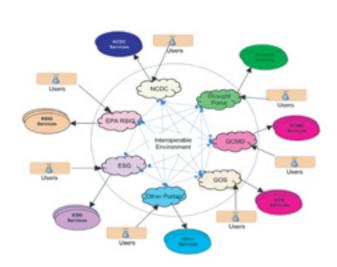






- Interoperable and Integrative Earth Science data management Platform
- Interoperable
 - Plug and Play (OGC)
 - Reduce development cost
 - Reduce development duplication (avoid one-ina-kind)
- Integrative
 - Integrate Current Resources from NASA ESG, ESIP EIE, GMU Computing

SWP for SDIs







SWP for EIE-Ontology

Extended SWEET Ontology ① Fires will cause dramatic change of local air quality D Volcanic eraptions influence at local/global scale (3) Inversion cause air pollution

SWP for EIE—Semantic Search



SWP for EIE —Prototype















