

#### A Framework for Understanding S+DIs

Raj Singh
Director, Interoperability Programs
Open Geospatial Consortium
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## Characteristics of a (S)DI



- Group of loosely affiliated organizations coming together to pursue a shared interest
- Benefits and costs are spread unevenly across parties
- No central point of control or authority

#### Observations

- The infrastructure has little value without broad, sustained participation
- Need a platform that allows middle-out participation
- Do a better job of matching up risk with rewards (costs & benefits)



## An SDI Taxonomy



| type                         | capability  | examples   |
|------------------------------|---|--|
| file transfer                | read  | file sharing, FTP, Web<br>download                           |
| file transfer<br>with search | read/search   | portals, such as<br>GEOSS GEO Portal,<br>Geospatial One-Stop |
| data infrastructure          | read/write/search   | Google MyMaps (plus<br>Maps Data API)                        |
| spatial data infrastructure  | distributed read/write/<br>search/spatial search                        | GeoConnections Canada(?)                                     |
| spatial compute cloud        | distributed read/write/<br>search/spatial search/<br>spatial processing | ?  |

# **OGC Service Match with SDI Taxonomy**



| type                         | capability  | examples                                       |
|------------------------------|---|--|
| file transfer                | read  | WFS, WCS                                       |
| file transfer<br>with search | read/search   | add CSW  |
| data infrastructure          | read/write/search   | add WFS-T (no WCS-T),<br>GeoRM                 |
| spatial data infrastructure  | distributed read/write/<br>search/spatial search                        | add Cascading WFS, <b>Geo- Synchronization</b> |
| spatial compute cloud        | distributed read/write/<br>search/spatial search/<br>spatial processing | add <b>distributed WPS</b>                     |

WCS: Web Coverage Service WFS: Web Feature Service

WFS-T: Web Feature Service – Transactional

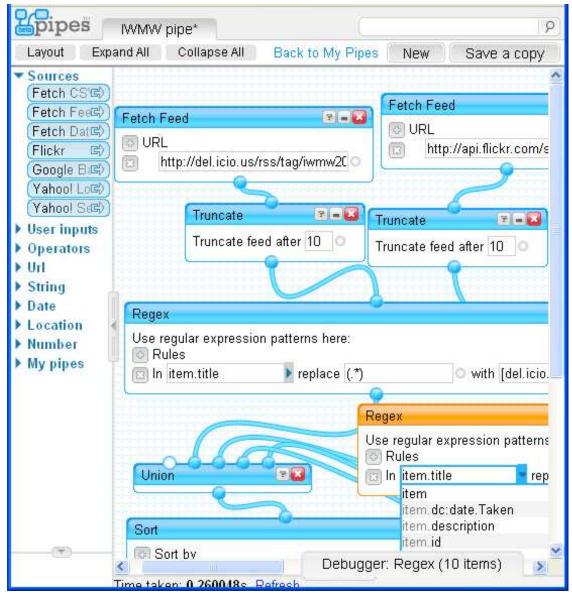
CSW: Catalog Services for the Web WPS: Web Processing Service

GeoRM: Geospatial Rights Management



## Distributed Data Processing: Yahoo! Pipes







## Read-Write GeoWeb: MyMaps Editor by Google



 With this application you can create, edit, share, and view personalized maps on your Android powered phone synchronized with the My Maps tab on Google Maps. Create a map on your desktop computer using Google Maps and then take it with you on the go and update it on location.

