

Data Improvements and CIESIN Architecture

GRIP Workshop

May 19, 2006

Cyclone Data Improvement

- Extend time series (possible for Atlantic and Pacific only)
- Use storm categories or raw wind speeds to refine impact analysis (in place of counts)

Flood Data Improvement

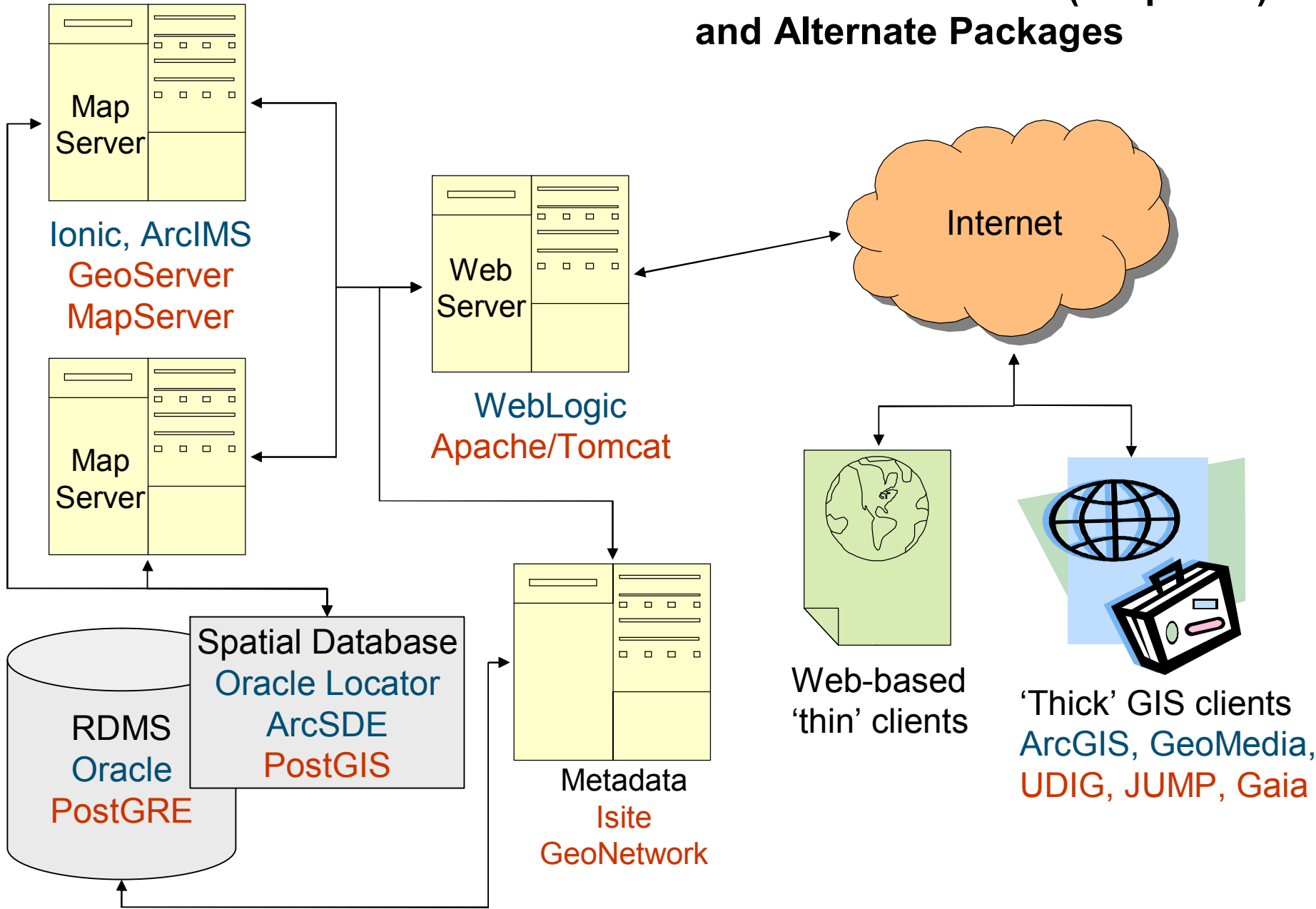
- Use Christian Herold's modeled flood surface
- Update flood count surface with new data posted to Dartmouth Flood Observatory
- Work with Dartmouth to improve georeferencing in past years (change points to polys, refine existing polys)
- Georeference flood information in CRED

CIESIN Architecture: Status

- Hotspots data archived and distributed as zip files via the web
- Distribution via OGC web services (WMS, WFS, WCS) planned for July 2006;
 - infrastructure for OGC services already in place
- GeoNetwork implementation planned for September, 2006

Commercial Software (COTS)
Free/Open Source Software (FOSS)

CIESIN Architecture (simplified) and Alternate Packages



CIESIN Status: Future Plans

- Move hotspots framework data to an integrated database; implement mechanisms for easy update
- Code improved methodology to allow for multiple runs as data revisions are made
- Data search and discovery via GeoNetwork – software package and network of implementers for metadata on geospatial data and mapping services
- Off-line delivery of Hotspots data via TerraViva!

Future Plans Cont'd

- On-line, interactive analysis tools for accessing global hotspots data and posing 'What if?' questions.
- Intersection of hazards
- Exposure calculations (km of road/rail, persons, economic product)
- Potential to link to existing services for best data (e.g., IRI Climate Data Library)
 - Will require specifications development and programming