OGC Evolving the Geospatial Web

The OpenGIS Consortium (OGC, www.opengis.org) has unveiled a Web Services Initiative to create an evolutionary standards-based, interoperable framework for discovery, access, integration, analysis, exploitation, and visualization of multiple online geodata sources. Concurrently, OGC issued a request for technology (RFT) to solicit input and secure financial commitments as well as sponsor organizations to help formalize the initiative.

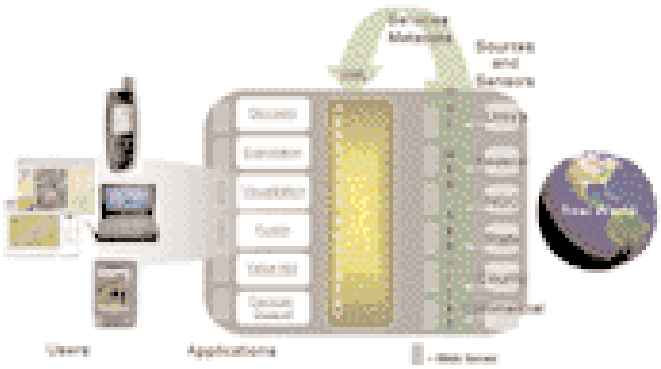
The Web Services Initiative is part of OGC's Interoper-ability Program and reflects an appreciation of the need to consolidate what OGC and its members have learned in previous interoperability initiatives. In essence, the initiative will enable future applications to be assembled from multiple, network-enabled geoprocessing and location services by establishing a set of rules governing how Internet-based geospatial service providers advertise their functionality and send and receive service requests. The figure below illustrates the concept behind the Web Services Initiative, which has several proposed focus areas.

The initiative will consolidate the progress made in previous testbeds to launch Web Mapping Testbed Phase 3. It will seek to extend OGC's geographic markup language (version 2.0, which was released April 4), Simple Feature Access, and Web Feature Server specifications with time, topology, and complex geometric-representation capabilities. It will focus on creating an open e-commerce architecture that dynamically connects Earth imagery and other geospatial information providers, maintainers, and users. The initiative will also develop interoperable–service chain and metadata extensions for geoanalysis and decision support. It will seek to define an open specification for information gathering from distributed, dynamic information sensors (GPS correction, water-quality monitoring, and space-based imaging stations, for instance) through common gateways and interfaces. And, it will seek to create a new technical standards approach for overcoming semantic differences in geospatial data and associated metadata.

OGC has also announced an OpenGIS Feature Geo-metry request for proposals (RFP). Feature geometry refers to the representation of the spatial extent of geographic objects in a GIS. The RFP aims to extend the interfaces in the Simple Features Implementation Specification to include geometric data types that will enable interoperability between GIS, engineering, and simulation applications; extend geographic data to full 3D representations; and support topological data structures.

A copy of the Web Services Initiative RFT is available at http://ip.opengis.org/ows/. Interested parties can also contact Jeff Harrison, OGC Interoperability Program manager at 703/628-8655 or jharrison@opengis.org. The RFP for OpenGIS Feature Geometry is available at www.opengis.org/techno/request.

— Jim Engelhardt



The OGC Web Services Initiative aims to provide a framework to enable the integration of disparate GIS, geoprocessing, and location services via the Internet.

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