Note: This document is not an OGC Standard. Internal and external documents cannot refer to it as such. Drafts are distributed for review and comment and are subject to change without notice.

Software Architecture: GeoMedia

Intergraph GeoMedia Web Map Architecture and the WMS Adapter

By implementing a Geographic Data Objects (GDO) Data Server for WMS (and WFS), any data store supporting the OGC WMS (or WFS) interfaces can be accessed and utilized by GeoMedia products in exactly the same way as any other data stores.

In GeoMedia or GeoMedia Professional, the user specifies a warehouse connection using the Connection Wizard. However, instead of specifying a directory path or database name, a URL is specified. Once the connection is made, the GeoMedia or GeoMedia Professional user can treat this warehouse like any other GeoMedia warehouse. Data from a WMS can be used as a background while data from a WFS is sufficiently rich for analysis. This includes the ability to use all analysis, display, and reporting functions.

Figure 1, below, depicts how the OGC interfaces are incorporated into the existing GeoMedia architecture.
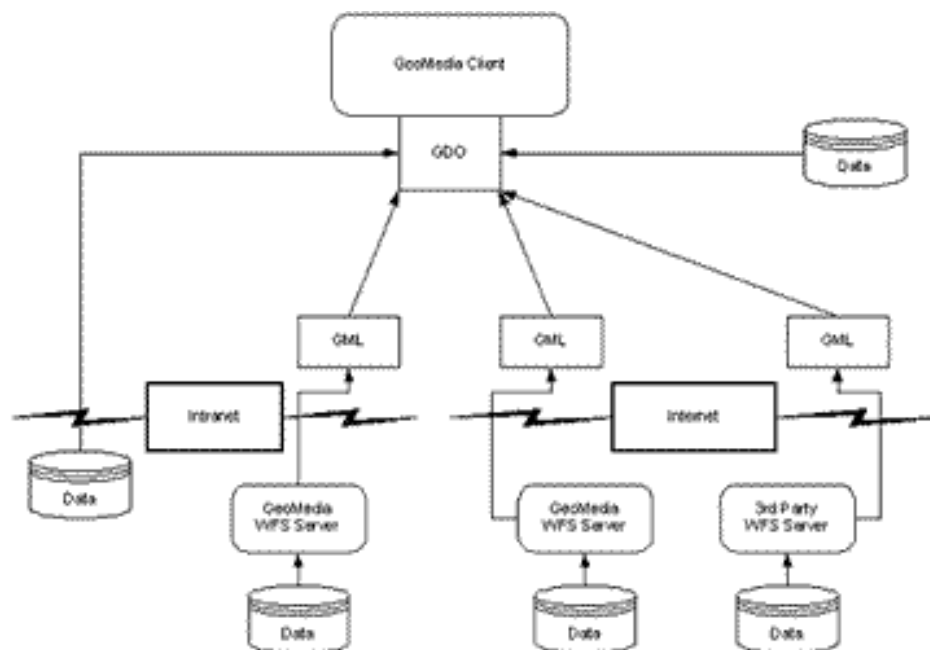
Figure 1: Intergraph GeoMedia System Architecture (courtesy of Intergraph)

GeoMedia WebMap and GeoMedia WebMap Professional can connect to WMS and WFS sources. In this manner, they can integrate data coming from traditional sources with data coming from OGC compliant web servers.

Why Implement OGC Interfaces in GeoMedia?

The standard spatial data access API used in GeoMedia is referred to as Geographic Data Objects (GDO). GDO is an open, public interface that providers can use to expose data to GeoMedia clients. Data connectivity is tied to the existence of GDO data servers (data providers). This has proven to be extremely useful in resolving the cases where there was no data sharing due to disparate GIS systems in use in different departments of an enterprise.

The user has a problem to solve and wants to solve that problem as quickly and effectively as possible. Intergraph's GeoMedia product suite capitalizes on this philosophy. GeoMedia supports live data access from many different vector and raster formats, integrating and fusing spatial data on-the-fly, and supporting analysis across and between disparate data sources.

With the incorporation of the OGC interfaces into GeoMedia, Intergraph has extended this philosophy to incorporate emerging industry standards for spatial data interchange and access across the WWW.