



## SPATIAL DATA INFRASTRUCTURES: POWERING COLLABORATION

Intergraph® provides geographic information systems (GIS) and interoperability technologies to enable the deployment of spatial data infrastructures (SDIs) for collaboration and distribution of geospatial data. This integrated framework of geospatial data, metadata, and tools allows government agencies around the world to use and share geospatial data in an efficient and flexible way. Sharing geospatial data is enforced by law in some regions of the world, and there is also a strong demand for it from a business perspective.

Intergraph, a world-leading geospatial solution vendor, clearly understands the demands and necessities of implementing SDI-enabled solutions. To facilitate this, Intergraph provides core technology packages based on our industry standards – GeoMedia®, GeoMedia WebMap, GeoMedia SDI Pro, and GeoMedia SDI Portal – which include advanced interoperability capabilities for sharing geospatial data and services. In addition, Intergraph offers proven support and service capabilities to help you achieve a successful, sustainable, and cost-effective SDI solution. These capabilities focus on helping you design the infrastructure for a SDI, build a SDI-compliant solution from the ground up, and redesign data models and schemas to meet the needs of a SDI.

### Features and Benefits

- **Interoperability** – Intergraph’s SDI application provides communication and collaboration between government entities, businesses, and the public. The resulting SDI-based solutions are in accordance with government initiatives such as the European Union’s INSPIRE, United Nations SDI, the Canadian Geospatial Data Infrastructure, and the U.S. National SDI.
- **Standards** – All of Intergraph’s technology and services for collaboration and distribution respect and implement the standards of the world’s relevant standardization bodies, such as

the International Organization for Standardization (ISO) and the Open Geospatial Consortium (OGC®).

- **Easy Discovery and Access to Geospatial Data** – Our services are designed to empower all variants of discovering resources through ISO 19115 metadata, as well as provide access to these resources based on visualization and downloading services.

### Customer Benefits

Intergraph’s SDI application offers you the following benefits:

- **Security and Safety** – Implementation of OGC and ISO compliant web services in a secured (authentication, authorization and access control) environment
- **Monitoring** – We can monitor all service activities, which include access and content monitoring
- **Sustainability** – As industry standards evolve, functionality and behavior may change. Intergraph is actively participating in all relevant industry committees – assisting in the creation of new standards – to ensure sustainability of your SDI.

### Technology for Enabling Spatial Data Infrastructures

Intergraph’s technology for enabling SDIs includes these software packages:

- **GeoMedia and GeoMedia WebMap** – Provides all necessary core services to implement a basic SDI
- **GeoMedia SDI Pro** – Provides additional services that deliver high-performance and secure SDI capabilities
- **GeoMedia SDI Portal** – Enriches smart and thin clients in their ability of becoming the visual front-end of a SDI future

## Spatial Data Infrastructure Implementation

To implement a SDI, organizations must first identify the:

- Responsible departments and persons
- Processes to be supported by the infrastructure
- Geospatial resources and then empower them with appropriate technology
- Needs of the infrastructure and then outline how to meet those needs

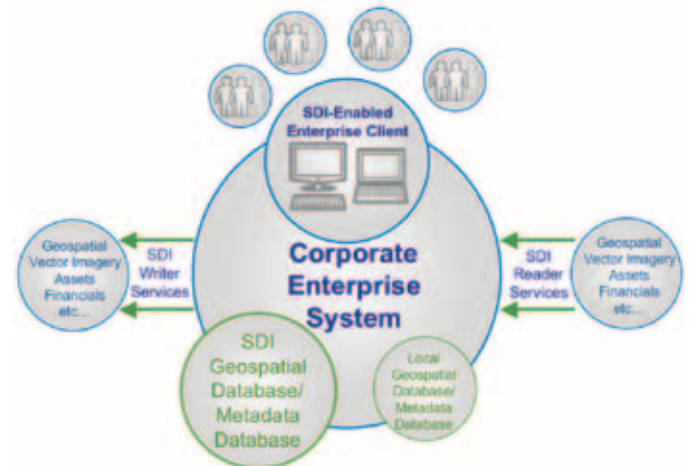
These issues clearly indicate that applying only software and hardware is not sufficient to implement a SDI. A SDI requires the implementation of a fully empowered solution covering all different aspects of processes, organization, infrastructure, and software. From a technology point of view, implementing a SDI requires technologies for:

- Providing interoperable services
- Consuming interoperable services
- Structuring geospatial data according to determined models
- Publishing the geospatial data
- ...all within the context of a secured and scalable framework

This leads to a principle architecture for storing, reading, writing, and displaying data in a SDI-technology manner, as pictured in the diagram. Corporate Enterprise Systems includes all the existing geospatial software and infrastructure available in this system.

## Intergraph is Your SDI Solution Provider

Intergraph clearly understands the demands and necessities of our customers in implementing an SDI-enabled solution, and will work with you to develop and implement a successful and cost-effective SDI that meets your exact needs. For more information, visit [www.intergraph.com/govt/sdi.aspx](http://www.intergraph.com/govt/sdi.aspx) or contact [sales@intergraph.ca](mailto:sales@intergraph.ca).



*Intergraph's SDI technology embraces all necessary services, structures, and user-interface elements, helping you develop a collaborative distribution solution for geospatial data.*

## ABOUT INTERGRAPH

Intergraph is the leading global provider of engineering and geospatial software that enables customers to visualize complex data. Businesses and governments in more than 60 countries rely on Intergraph's industry-specific software to organize vast amounts of data into understandable visual representations and actionable intelligence. Intergraph's software and services empower customers to build and operate more efficient plants and ships, create intelligent maps, and protect critical infrastructure and millions of people around the world.

Intergraph operates through two divisions: Process, Power & Marine (PP&M) and Security, Government & Infrastructure (SG&I). Intergraph PP&M provides enterprise engineering software for the design, construction, and operation of plants, ships, and offshore facilities. Intergraph SG&I provides geospatially powered solutions to the defense and intelligence, public safety and security, government, transportation, photogrammetry, utilities, and communications industries. For more information, visit [www.intergraph.ca](http://www.intergraph.ca).

