Government Collaboration and Public Distribution with Spatial Data Infrastructure

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SDI READY

Factors driving SDI

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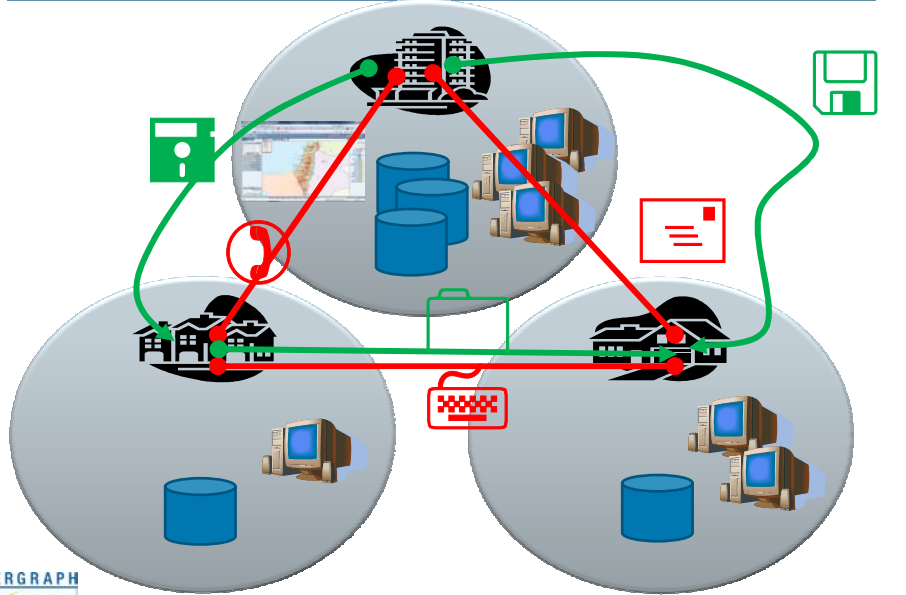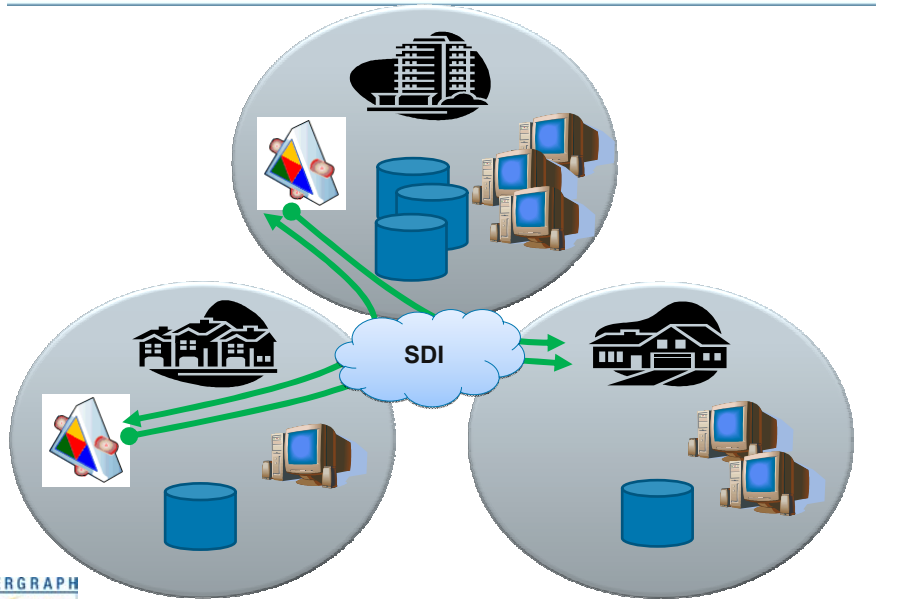
- **Explosion of geospatial data** : amount of data managed by corporations is growing (along with refinements in digitizing processes)

- **Maturity of geospatial technology** (standards in place)

- **Demand for instant access** to any available geospatial sources in a situational context of a user.

- **Interconnecting information silos** in government, in corporations in any organization or community

INTERGRAPH
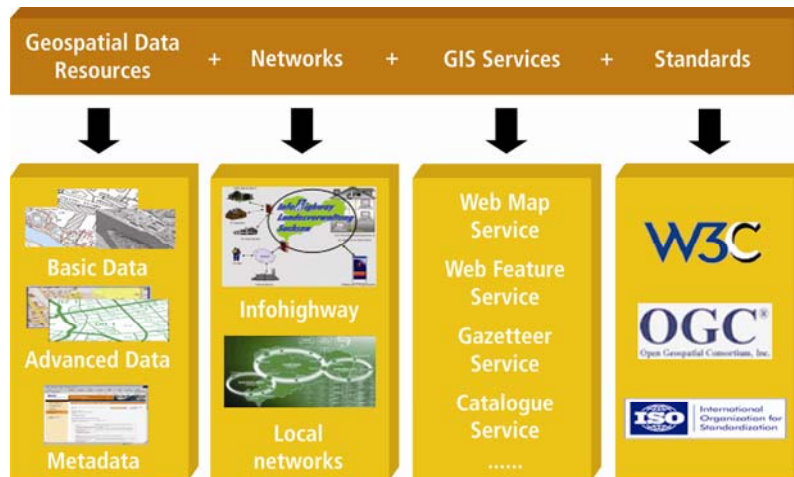SDI READY

Non SDI world

SDI world

What is SDI

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SDI = Spatial Data Infrastructure

Geospatial Data Resources + Networks + GIS Services + Standards
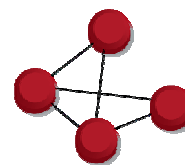

SDI evolution

INTERGRAPH

decentralized

1. Spatial data transfer standards

data redundancy and numerous synchronization problems
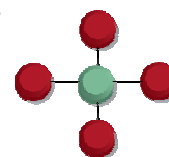
ETL only

point to point

2. Spatial data clearinghouses

- Sites through which a number of services related to spatial data can be accessed
- implemented as a means to obtain "off-the-shelf" data
- Less functional capabilities available
- Data oriented

centralized

hub and spoke

SDI evolution

3. Spatial data infrastructures

- "technologies, policies, and people necessary to promote sharing of geospatial data through all levels of government, the private and non-profit sectors, and the academic community"

autonomous & federated

service bus

- Provide standardized access to different geodata providers through service oriented architecture

- Requires a registry or catalog of available services and Metadata
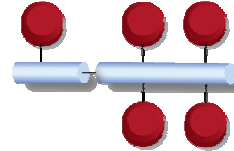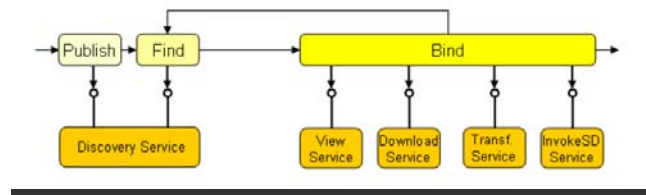

SDI evolution

4. Geoportals

- SDI frontend
- Web site that presents an entry point to geographic content on the Web
- focus on user and user epxerinece
- Includes tools for discovery of information sources and content and online access to Web-based services
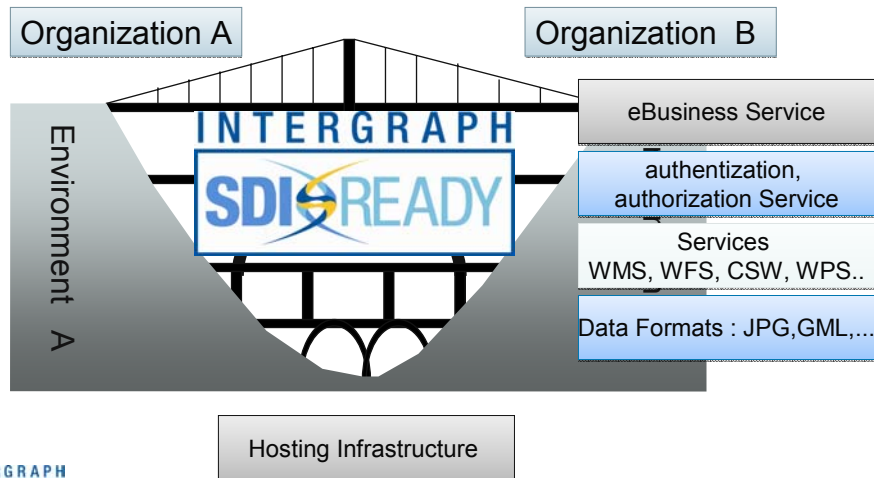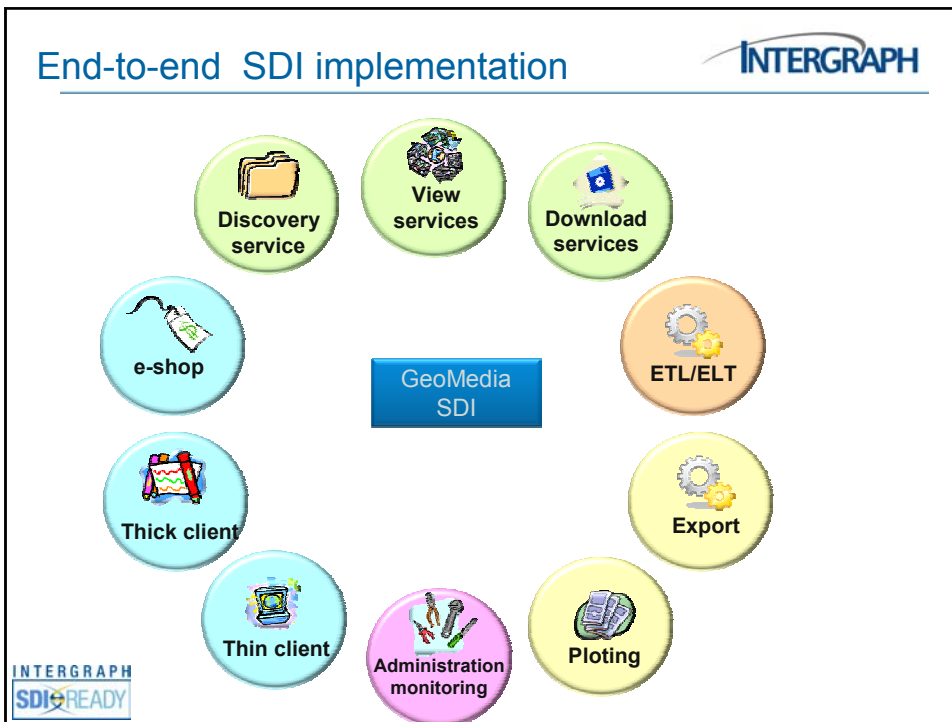
INSPIRE= the European way of SDI

- Bringing data and services together through a Spatial Data Infrastructure

- Data remain with the organizations that collect them and maintain them

- Easy to discover and access data and services for users

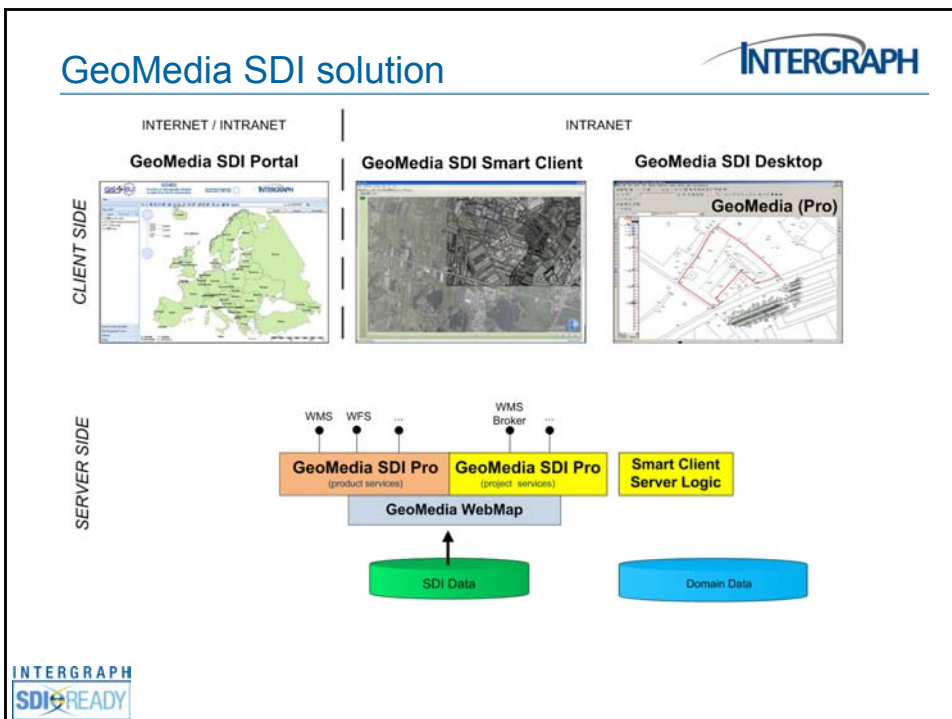- Adopting common standards and protocols

- Publish-Find-Bind pattern

# Building bridges with SDI

End-to-end SDI implementation

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Discovery service · View services · Download services · ETL/ELT · Export · Ploting · Administration monitoring · Thin client · Thick client · e-shop · GeoMedia SDI

GeoMedia SDI solution

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INTERNET / INTRANET · INTRANET

GeoMedia SDI Portal · GeoMedia SDI Smart Client · GeoMedia SDI Desktop

GeoMedia (Pro)

CLIENT SIDE

SERVER SIDE

WMS · WFS · ...

WMS Broker · ...

GeoMedia SDI Pro (product services) · GeoMedia SDI Pro (project services) · Smart Client Server Logic

GeoMedia WebMap

SDI Data · Domain Data

SDI clients

GeoMedia SDI Portal | GeoMedia SDI Smart Client | GeoMedia SDI Desktop

INTERNET / INTRANET | INTRANET

CLIENT SIDE

GeoMedia SDI Desktop

- Universal medium for any geospatial data
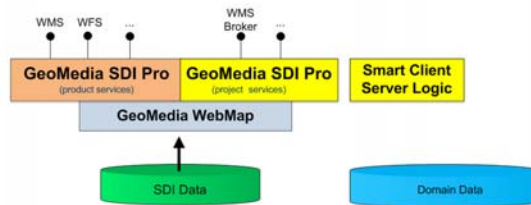- Treat remote source same as local source
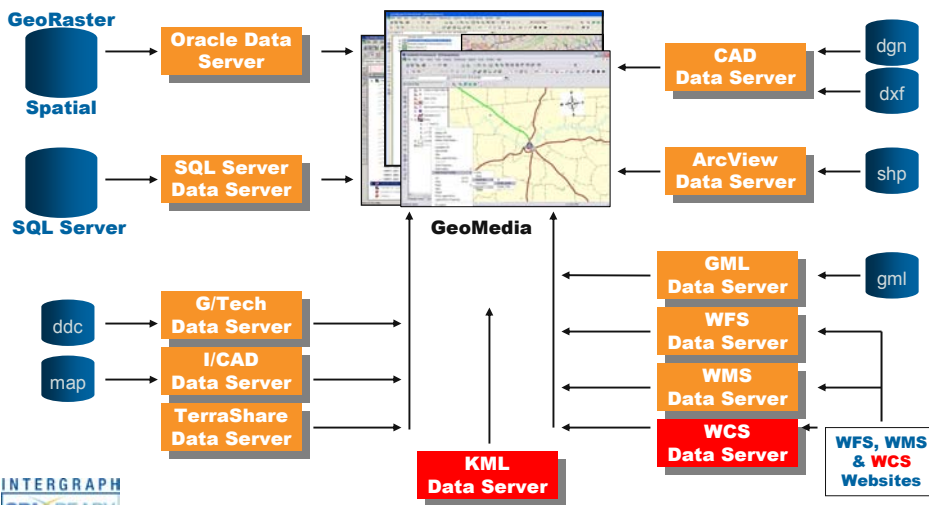
GeoMedia SDI-Portal
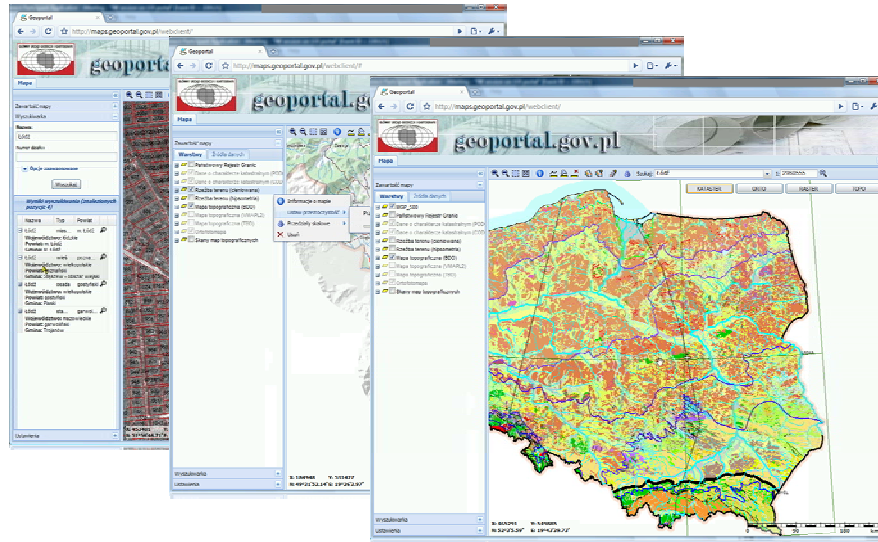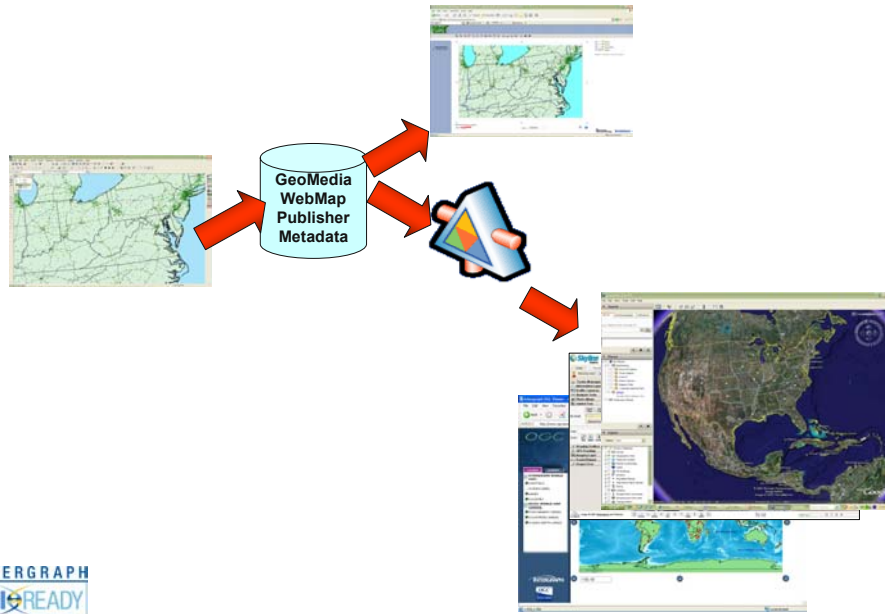

GeoMedia SDI-Portal
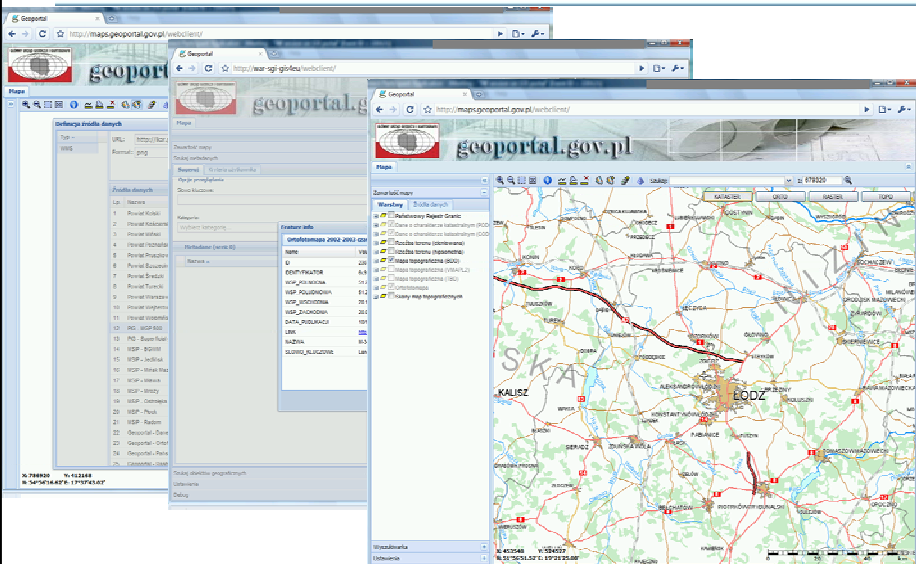
SDI server

GeoMedia WebMap

Create and configure "out of the box" web
services with WebMap Publisher

- Generate Map (WMS)
- Manipulate Feature (WFS)
- Catalogue (CSW)
- Address Geocoding (OpenLS)
    - and Reverse Geocoding
- Generate Route (OpenLS) (Pro only)
- Coverage (WCS)
- KML publish and data server
- WCS (coverage) data server
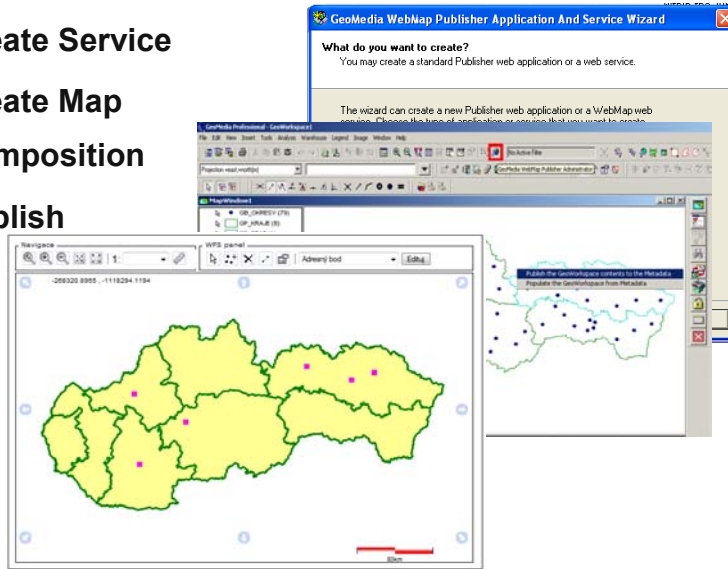
GeoMedia WebMap Data
consumed by standard OGC clients

Publish   GeoMedia WebMap Publisher

GeoMedia/Professional

1. Core configuration of Services in GeoMedia

2. Extending configuration via Publisher in Meta DB

SDI SERVICES
WMS   WFS   WCS

GeoMedia WebMap

3. Supply SDI Services

Meta Data

Geo Data

Slide 1: **GeoMedia WebMap Publisher** (Publish / INTERGRAPH)
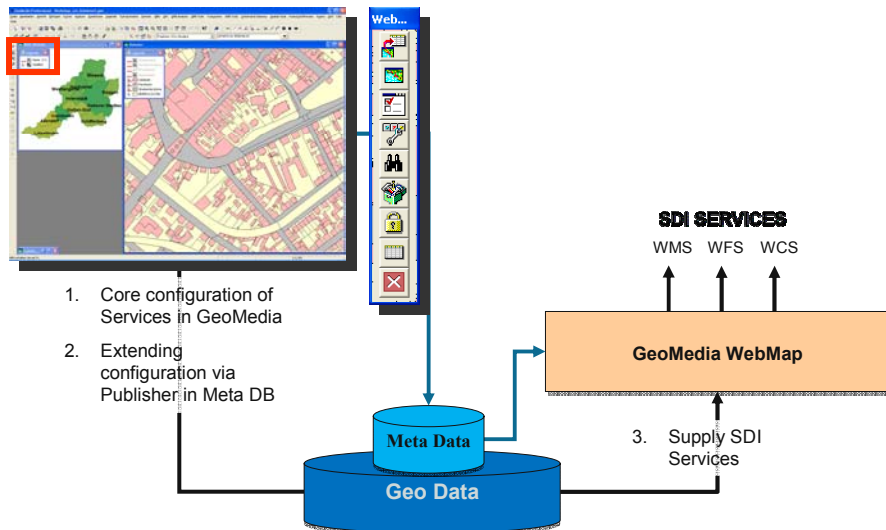
1. **Create Service**
2. **Create Map Composition**
3. **Publish**

Slide 2: **Publish metadata** (Publish / INTERGRAPH)

Data c...

Spatial ext...

The...

Coord.sys...

Time stamp...

...

GeoMedia SDI PRO
Catalogue and Search Solution

GeoMedia SDI PRO
Catalogue and Search Solution

OGC CS-W Standard

GeoMedia Fusion Data harmonization
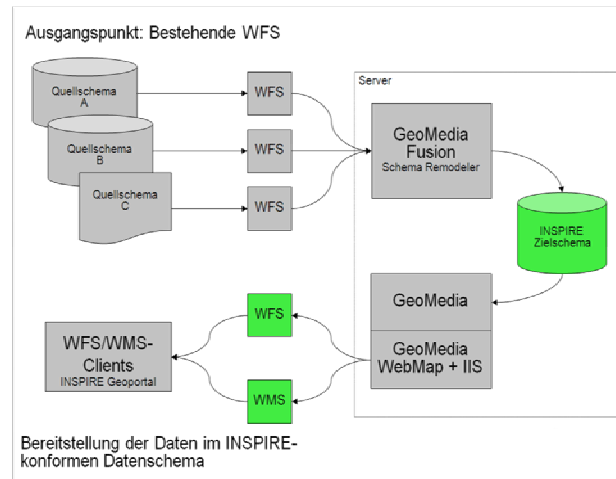
Resons of GeoMedia SDI success

- **People** : competence and dedication. Market, industry and technology knowledge

- **Solutions:** One size doesn't fit all. Products plus projects

- **Standards:** commited to industry standards and openess

- **Innovation :** distributed geospatial warehousing

- **End-to-End** : Intergraph is the only global geospatial software company providing professional services as part of its business model underline locally

Contact

INTERGRAPH

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Thank You

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