

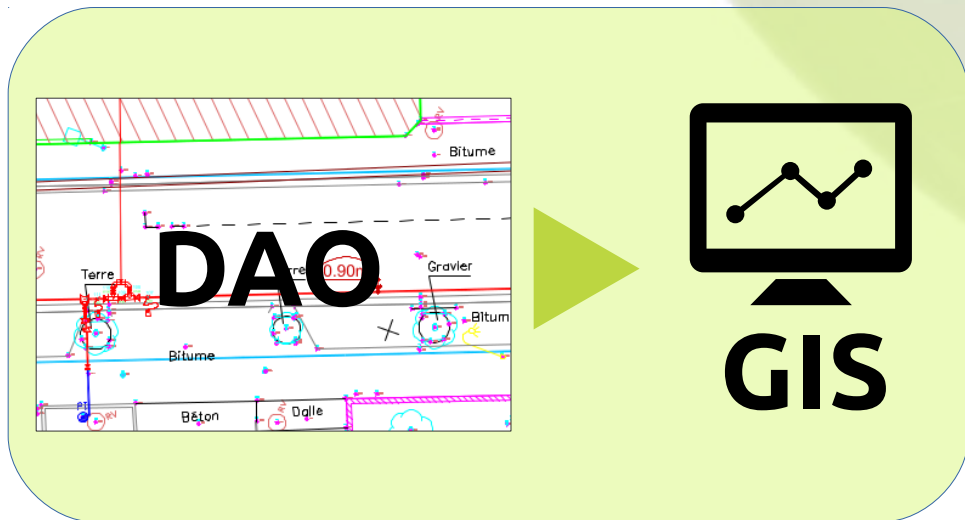


A sustainable path to interoperability



– INSPIRE Conference 2015 –

We innovate for spatial data interoperability



Heterogenous data integration
FOR
GIS data updating

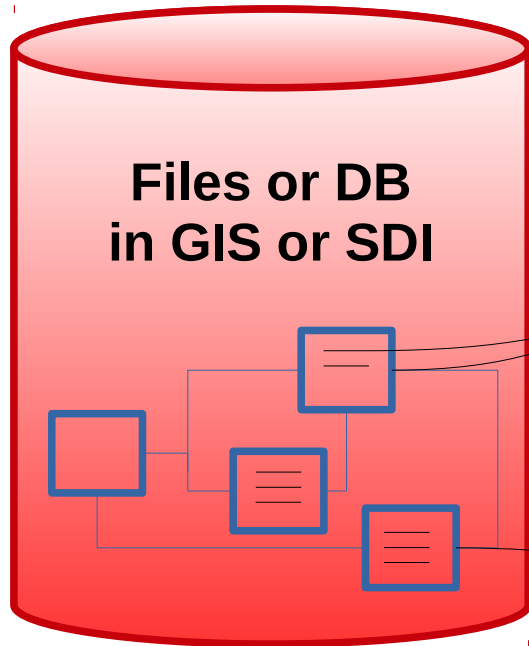


Download service
FOR
GIS data sharing

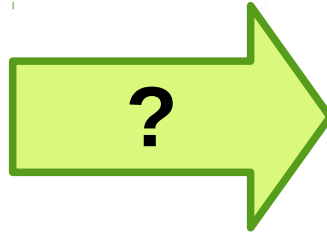
- **The job to be done**
- **Our transformation drivers**
- **How does it work ?**
- **What's different ?**
- **Feedback**

Interoperability's realm

Existing spatial data

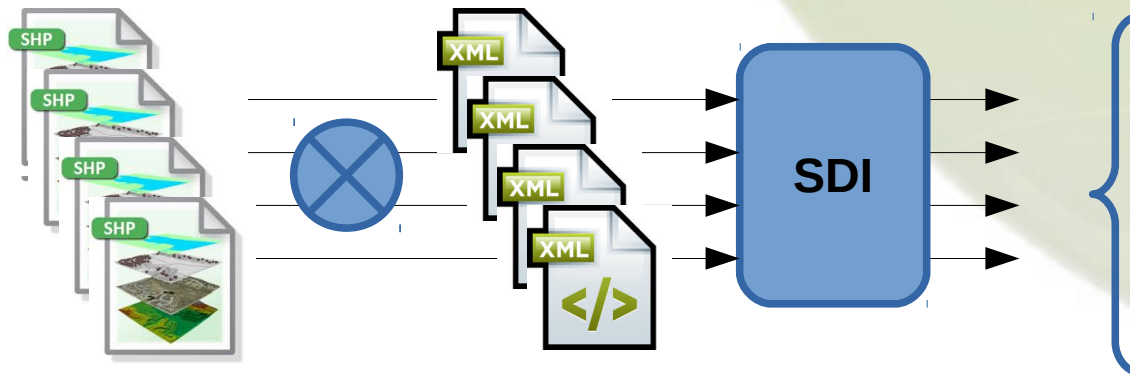


Files or DB
in GIS or SDI



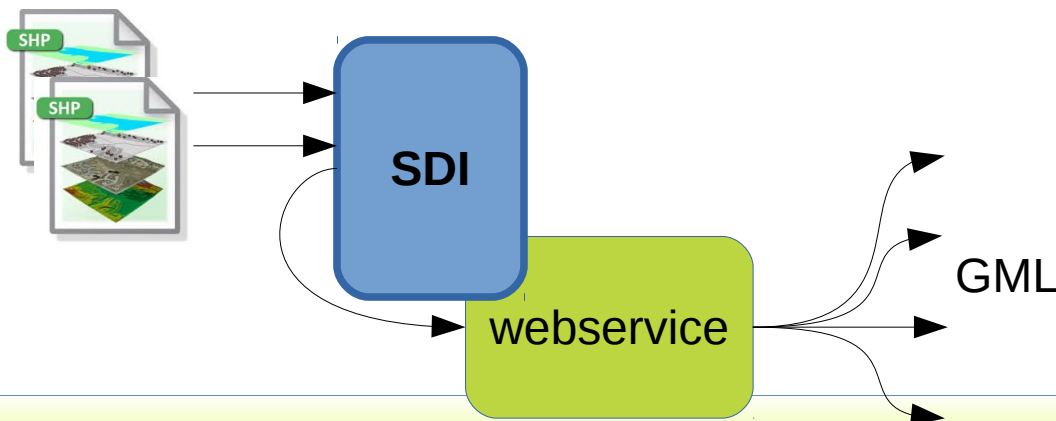
```
-<wfs:FeatureCollection numberReturned="28" numberMatched="28" timeStamp="2015-0...
+<wfs:boundedBy></wfs:boundedBy>
-<wfs:member>
-<plu:SpatialPlan gml:id="385372008082820140623T125337Z">
-<plu:inspireId>
-<base:Identifier>
-<base:localId>38537_20080828</base:localId>
-<base:namespace>http://dataproversns/sp</base:namespace>
-<base:versionId>2014-06-23T12:53:37.000Z</base:versionId>
-</base:Identifier>
-</plu:inspireId>
-<plu:extent>
-<gml:MultiSurface srsName="urn:ogc:def:crs:EPSG::2154">
-<gml:surfaceMember>
-<gml:Polygon srsName="urn:ogc:def:crs:EPSG::2154">
-<gml:exterior>
-<gml:LinearRing>
+<gml:posList srsDimension="2" count="618"></gml:posList>
-</gml:LinearRing>
-</gml:exterior>
-</gml:Polygon>
-</gml:surfaceMember>
-</gml:MultiSurface>
-</plu:extent>
-<plu:beginLifespanVersion>2014-07-01T21:00:58Z</plu:beginLifespanVersion>
-<plu:officialTitle>POS du 28/08/2008 de LA VERPILLERE - 38537</plu:officialTitle>
-<levelOfSpatialPlan xlink:title="local" xlink:href="http://inspire.ec.europa.eu/codelist/...>
-<plu:validFrom>2008-08-28</plu:validFrom>
-<plu:alternativeTitle>
Plan d'occupation des sols - Commune de LA VERPILLERE - 38537
-</plu:alternativeTitle>
-<plu:alternativeTitle>
-<planTypeName xlink:title="Plan d'occupation des sols" xlink:href="http://inspire.ec.eu...>
-<processStepGeneral xlink:title="POS approuv  - r vision de PLU" xlink:href="http://in...>
-<plu:backgroundMap>
-<plu:BackgroundMapValue>
-<plu:backgroundMapDate>2010-01-01T11:00:00Z</plu:backgroundMapDate>
-</plu:BackgroundMapValue>
```

Offline transformation



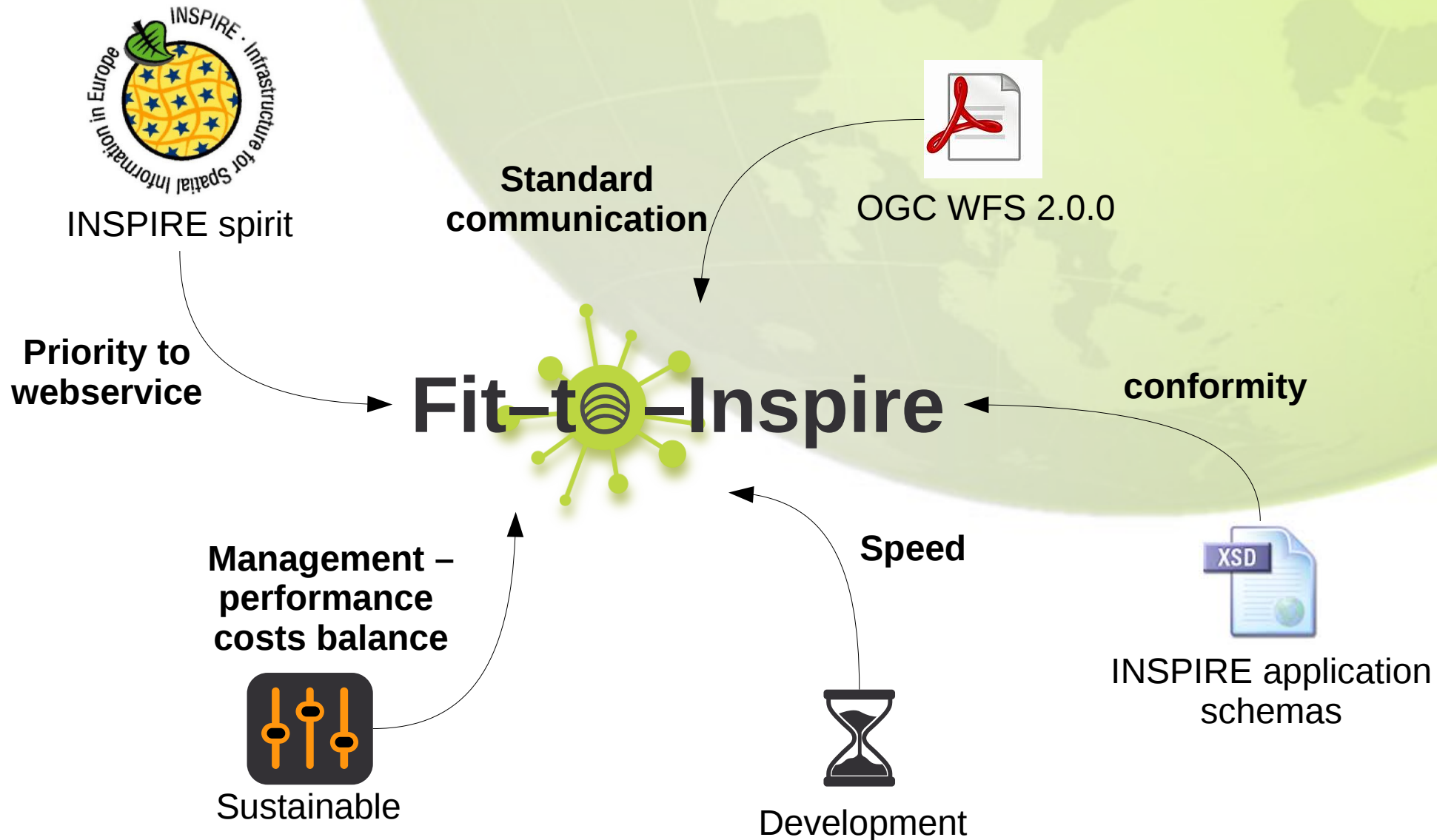
- > Predefined datasets
- > New file = new metadata
- > Needs XML skills

Online transformation

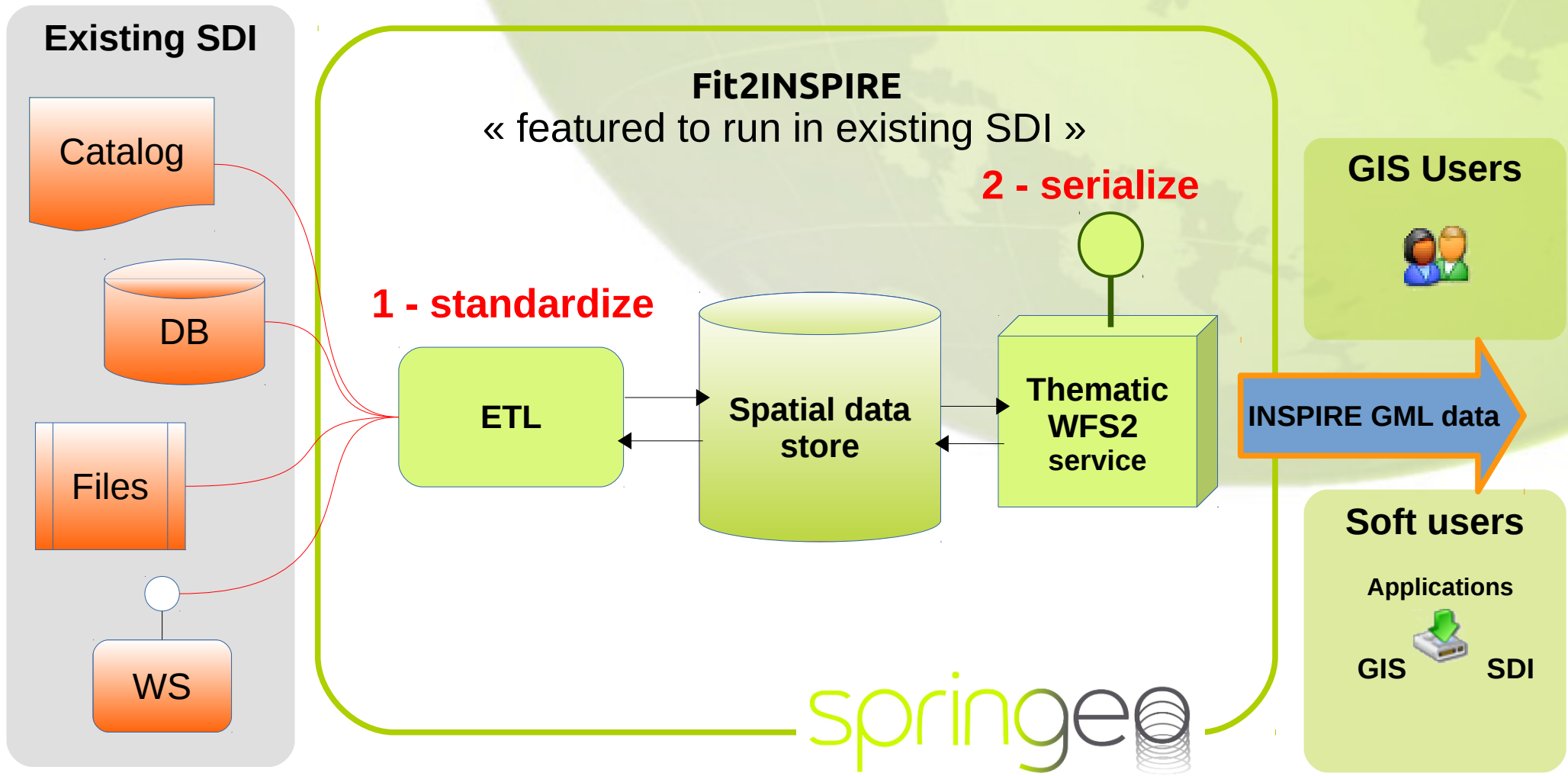


- > Direct and custom access to data
- > "XML-free"
- > Hard to setup

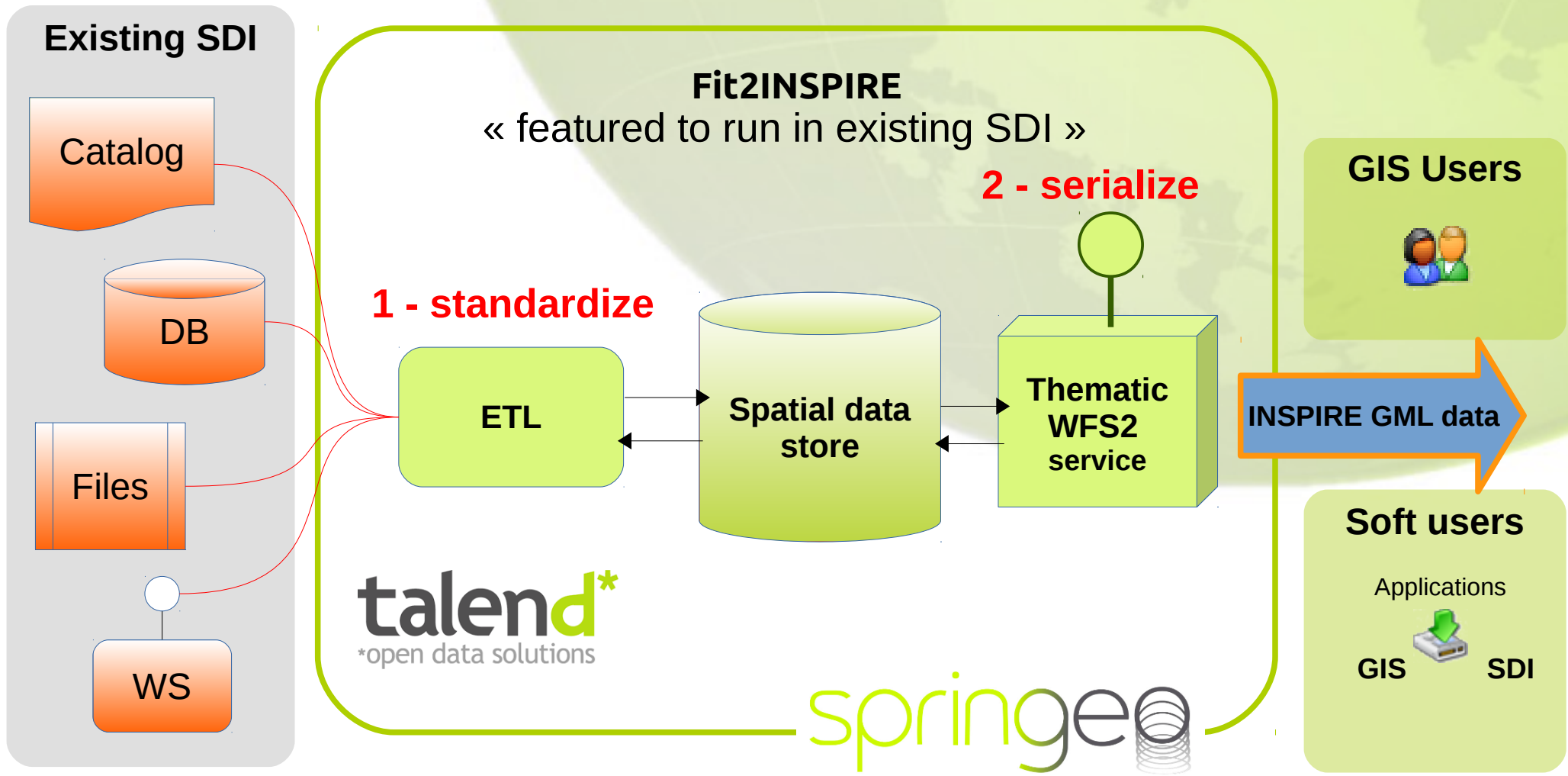
Main drivers



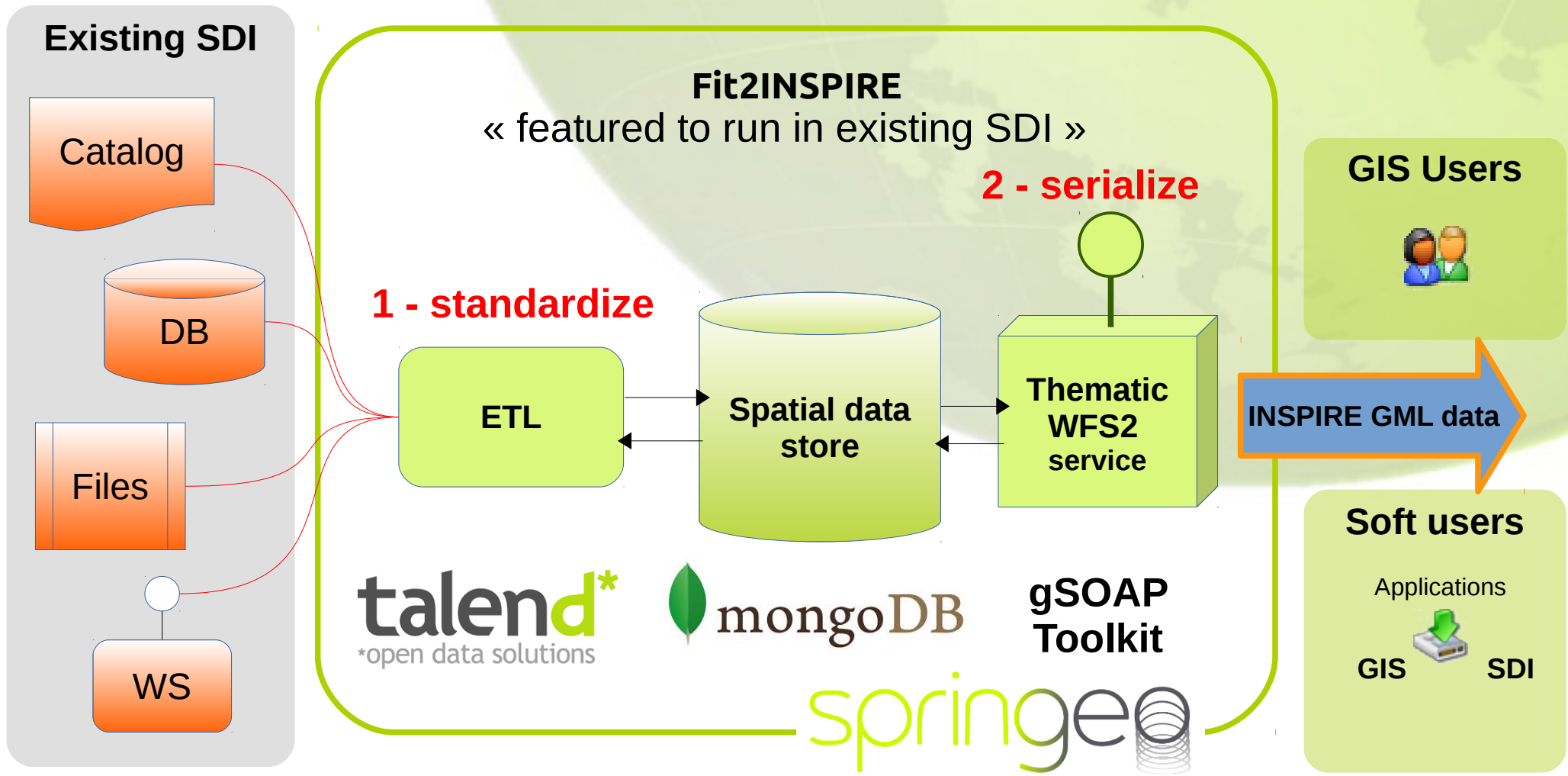
Transformation recipe



Transformation recipe



Transformation recipe



Why are we different ?

- ① **Domain specific** : 1 theme, 1 webservice
- ① **Schema driven for a strict interoperability**
- ① **Customization**
 - > Rich GML output according to user needs
- ① **New cocktail of technologies**
 - > Stand-alone server rather than existing servers
 - > NoSQL rather than RDBMS
 - > Open software



Test our online demo
<http://www.springeo.fr/demo>

- **Planned Land Use demo**
 - > 300h of development
 - > 1 server running for 6 months

- **The interoperability challenge is complex**
 - > Work together : bet on your favorite SDI !
 - > Aggregate data before its delivery : one endpoint is better for users

- **SDI are still far from the beginning**

Advantages

- > Less data and metadata to manage
- > XML-free backoffice
- > Complex schema support
- > Lightweight server
- > Fast coding

Drawbacks

- > Suitable only for a significant amount of data
- > Manual standardization step
- > Not scalable in case of many heterogeneous data

- We are working on a UI to facilitate data harmonization on step 1
- We are open to partnerships to share our know-how

Thanks !

Jean-Loup Delaveau

CEO and Geodata manager

<http://www.springeo.fr>

delaveau@springeo.fr

+33 7 85 53 04 23