



EUROPEAN
ENTRANCE



Union Level INSPIRE Geoportal towards operational Status: "European INSPIRE GeoEntrance" Project Presentation

SCOPE

Design and implement a web-based geoportal and its supporting services.

- ❖ Access member states' Discovery & View Services
- ❖ Provide a user friendly experience, beyond traditional SDI portal concept
- ❖ Design a modular and scalable system based on open standards
- ❖ Take into account the benefits of an Open Source solution
- ❖ Integrate registries and thesauri
- ❖ Implement the GEMET thesaurus and INSPIRE registries
- ❖ Enhance the performance of Discovery & View Services

MAIN CHALLENGES

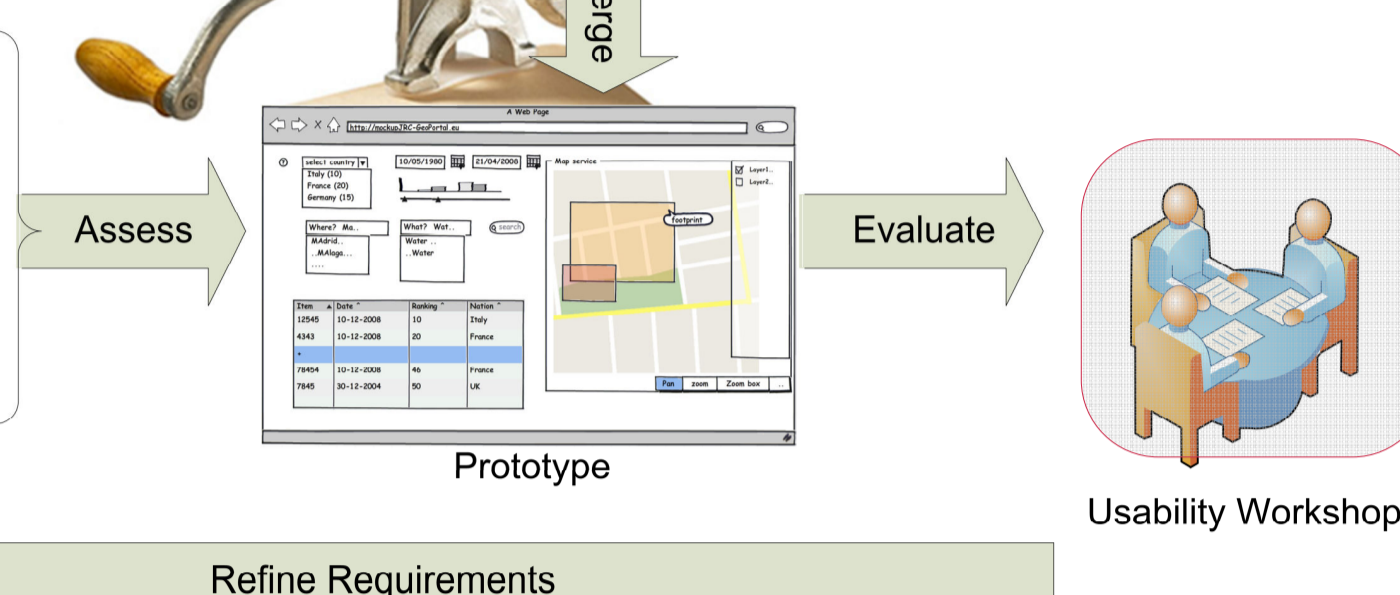
- ❖ Interface with 27 member states' network services implementations
- ❖ Make accessible 200TB+ of member states' map data
- ❖ Serve potentially hundreds of thousands of users
- ❖ Provide an innovative "Interactive Discovery" based on fast metadata caching
- ❖ Combine and access fast the map data of member states

UI Design and "Interactive Discovery"

The detailed requirements set by the tender are mostly functional. The challenge is to put together the single functions into an intuitive information flow and User Interface design.

A survey of existing Geoportals has been done. Key result: search filters, result list and map viewer should be on one single page and interact in real-time with each other and the user's input.

- Requirements
- ❑ GP8 - Customize user experience
 - ❑ GP9 - User participation tools
 - ❑ AM3 - Multilingual capabilities
 - ❑ SS1 - Search and browse
 - ❑ SS3 - Gazetteer
 - ❑ SR1 - Results Presentation
 - ...



The usability of the Geoportal will be one main focus of the development, in particular for the "Interactive Discovery".

End User Involvement

A system that connects 27 member states and will serve users from all over Europe has a high number of stakeholders. The project foresees to involve representative users in order to test intermediate prototypes.



Usability Workshop

The project will organize usability workshops, at least one as a physical meeting with a restricted number of users based on the first prototype and then a second "virtual workshop" that will involve a larger base of interested users yet to be identified.

A questionnaire and "test-parcours" will be prepared and at the first workshop usability experts will guide the test users through the tasks to perform in order to ensure comparability of the feedback from different users.

The "virtual workshop" will most likely not be at a fix date, but make available the second prototype to a broader selection of end-users for a period of time. Also this test round will encourage the users to follow a test-parcours, as well as to give free feedback.

Some of the feedback may not have direct influence on the first final version of the portal, but may help to drive the already foreseen extensions of the portal.

Access INSPIRE spatial datasets and services through a unique entry point, with seamless integration of member states' services, enabling multi-lingual searches, iterative refinement of result sets and cross-border combination of datasets in customized user maps.

Expandable and scalable System Architecture

The system has a modular architecture in order to be able to easily expand the system with new functionality and integrate new network services.

All SW products chosen (apart from the basic pre-existing infrastructure) are free and open source. The GeoEntrance project specific code with re-use potential will be subject to a FOSS license, too, in order to foster re-use and harmonization.

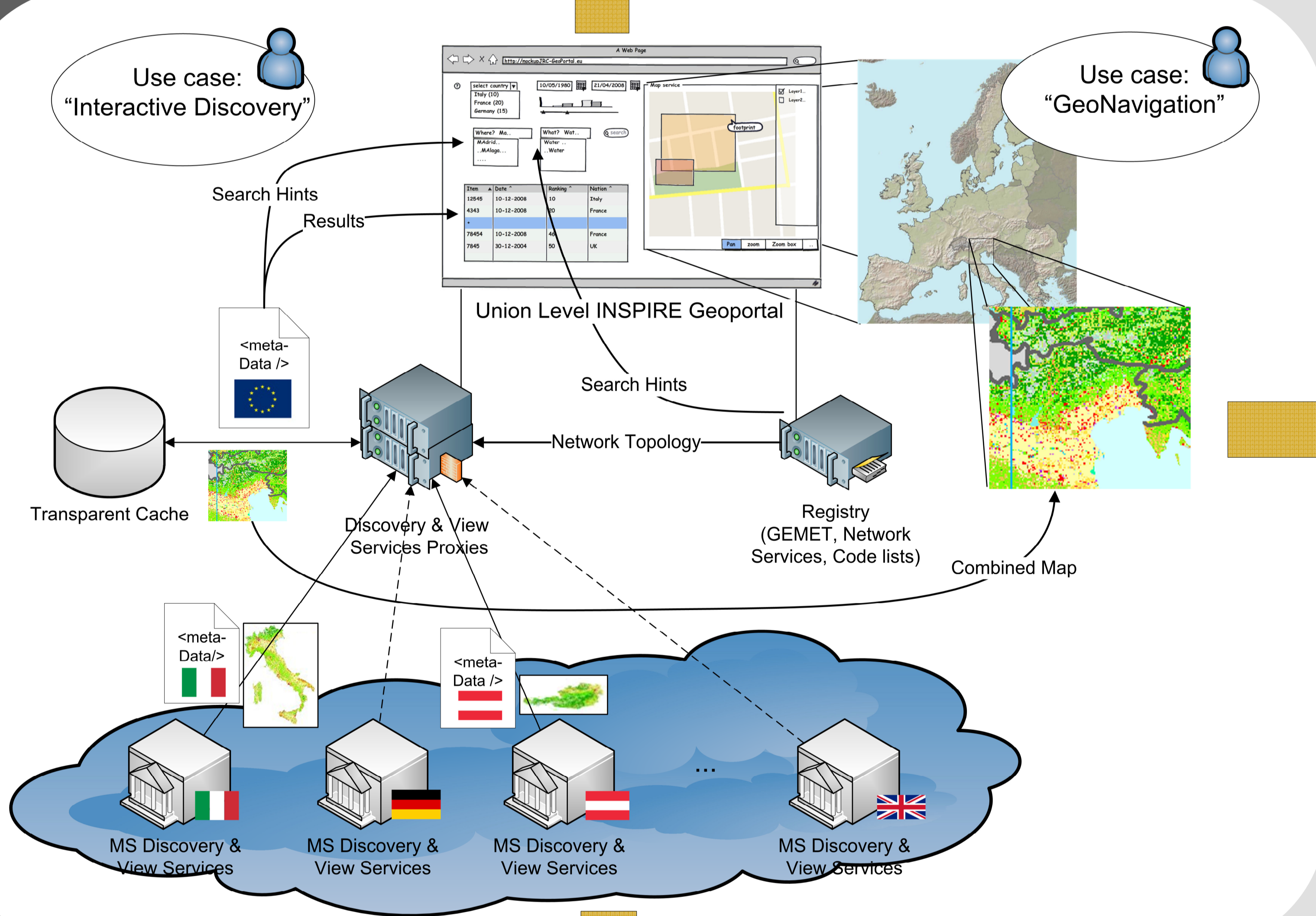
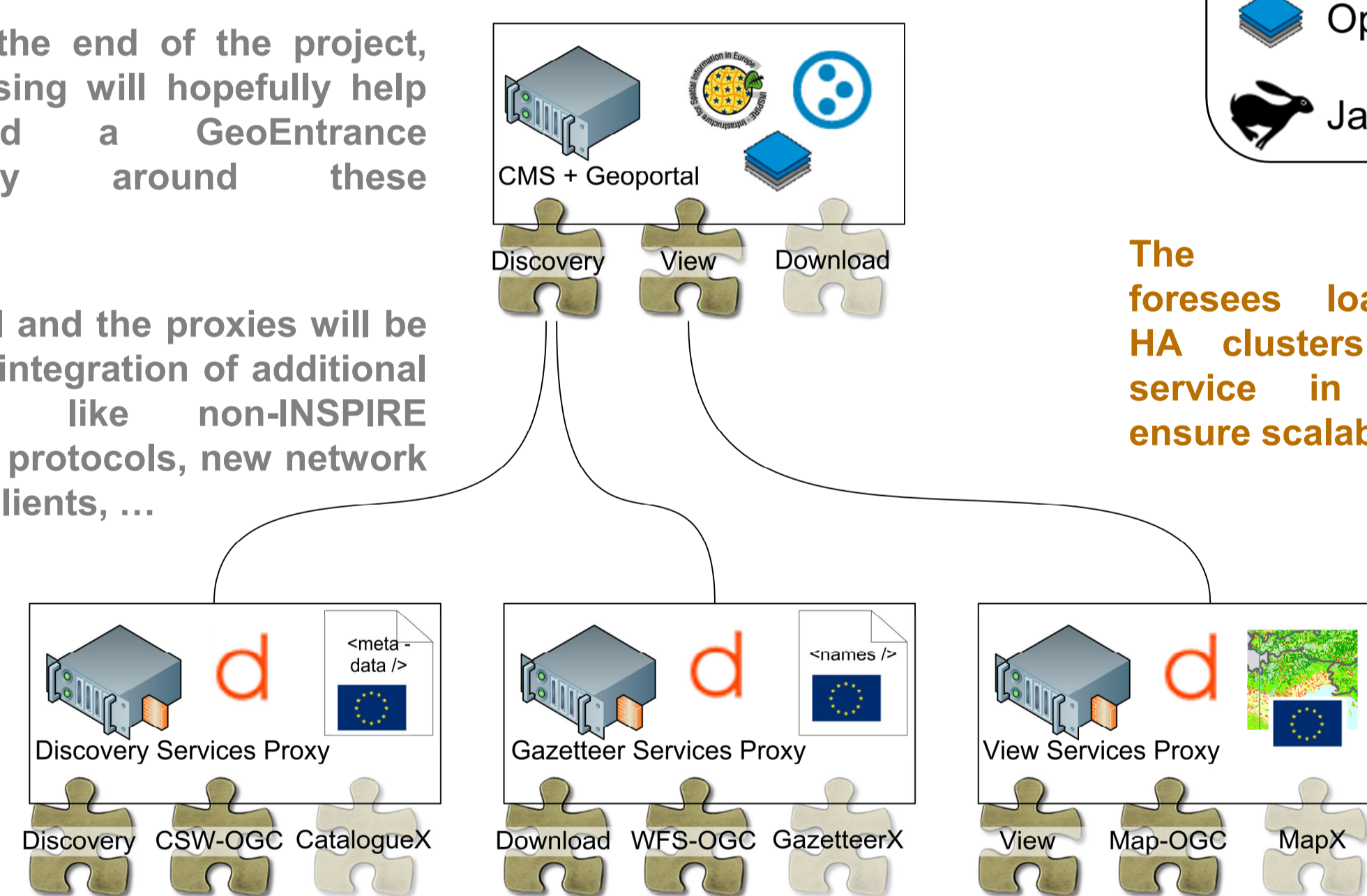
Towards the end of the project, this licensing will hopefully help to build a GeoEntrance community around these modules.

The portal and the proxies will be ready for integration of additional functions, like non-INSPIRE catalogue protocols, new network services clients, ...

Main OSS products

- Linux
- deegree
- plone
- OpenLayers
- Jackrabbit

The deployment foresees load-balanced HA clusters for each service in order to ensure scalability.



FURTHER INFORMATION

Project Home

www.planetek.it/eng/projects/inspire_geoportal

INSPIRE

inspire.jrc.ec.europa.eu

Current JRC prototype:

www.inspire-geoportal.eu

FIND THIS POSTER



http://documents.irisnet.com/attachments/2621446/pk229-54-1.0_GeoEntrance_Poster_INSPIRE_Conf_2011.pdf

Authors

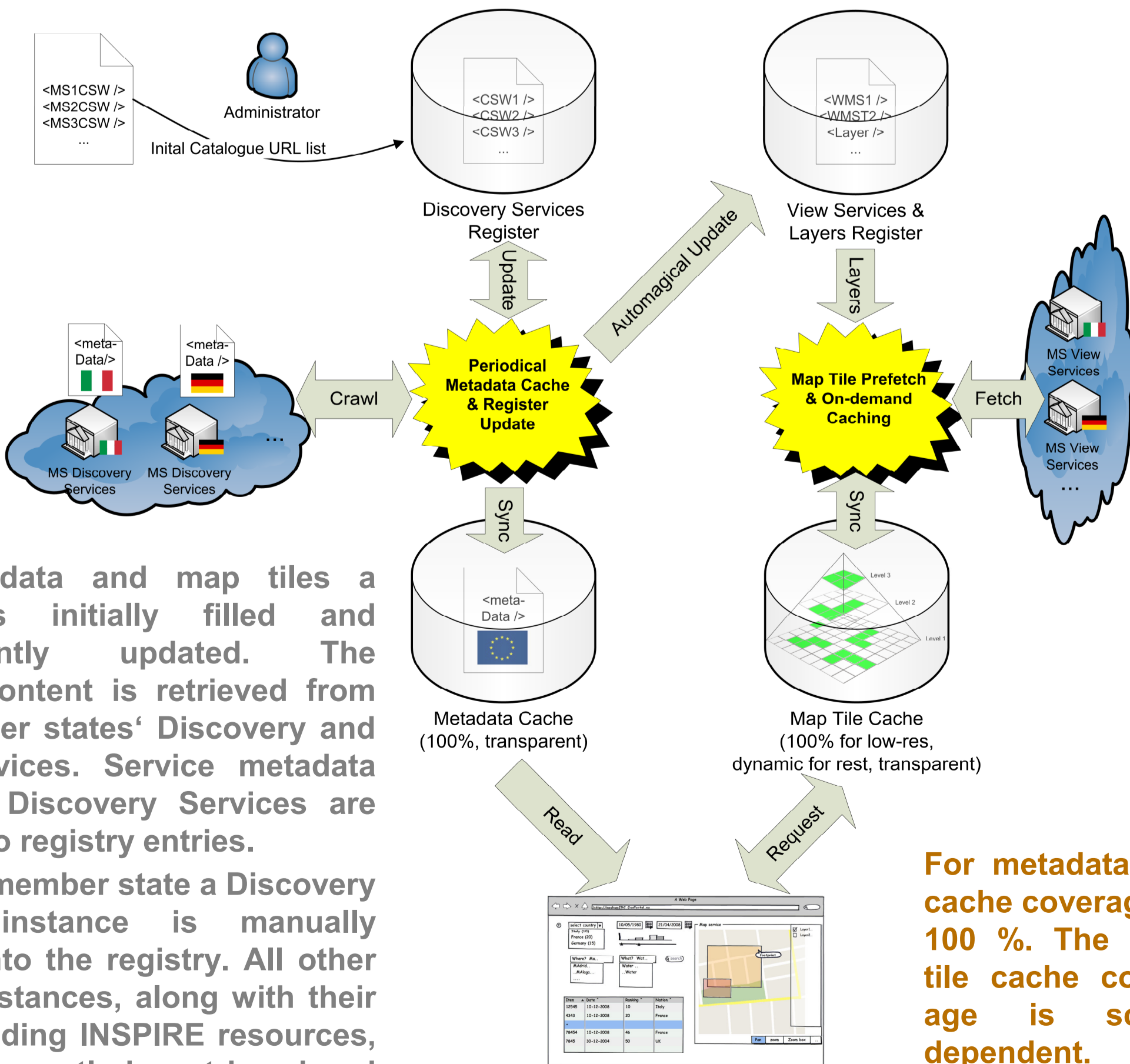
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Network Services Caching

To ensure a good user experience the portal uses a proxy & cache component which ensures fast delivery of maps and meta-data.



For metadata and map tiles a cache is initially filled and subsequently updated. The cache's content is retrieved from the member states' Discovery and View Services. Service metadata from the Discovery Services are turned into registry entries.

For each member state a Discovery Service instance is manually entered into the registry. All other service instances, along with their corresponding INSPIRE resources, will subsequently be retrieved and validated "automagically".

For metadata the cache coverage is 100%. The map tile cache coverage is scale-dependent.

Project Status

The project is in an early stage of requirements assessment. The project identified over 30 technical questions on the functional requirements, that are currently discussed with the stakeholders.

Many of these issues will be discussed together with the Initial Operating Capability Task Force (IOC-TF) right here at the conference in order to ensure a maximum of alignment with the current over-all state of INSPIRE.

Start up		Nov 2011 1st Prototype				April 2012 2nd Prototype				July 2012 Final Version							
1st Requirements Assessment	1st Iteration	2nd Req. Assessment	2nd Iteration	3rd Iteration	Transition												
M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18
INSPIRE Conference 2011				1st Usability WS				2nd Usability WS									

In order to support the requirements assessment, a project internal issue tracker has been set-up and is currently used by the project's Management Group members from JRC, EUROSTAT and the consortium and helps to ensure a high level of interaction and traceability.

A components level architecture has been drafted and traced against the requirements. Meanwhile the consortium has refined the technical system requirements to be discussed with DIGIT, the hosting organization.

The first development iteration will take place from August to November 2011.