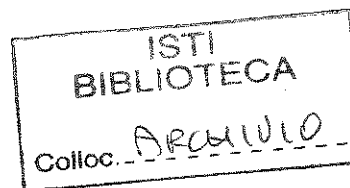


A3-18
2002

SchOlnet



A Digital Library Testbed to Support Networked Scholarly Communities

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IEI-CNR
Italy

SchOlnet

General Information

- ☐ Funding Programme
 - EU V Framework Programme
 - IST - Research Networking
- ☐ Effort: 220 p/m
- ☐ Duration: 30 months
- ☐ Commencement date: November 2000

General Information

☐ Project consortium

CNR	(Scientific Coordinator, Italy)
INRIA	(France)
FhG	(Germany)
FORTH	(Greece)
SICS AM	(Sweden)
Univ. of Masaryk	(Czech Republic)
ERCIM	(Administrative Coordinator, France)

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Objective

SCHOLNET aims at developing a digital library service system to support the communication and the collaboration within networked scholarly communities

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- ☐ information acquisition, description, archiving, search, access, and dissemination of multimedia documents
- ☐ handling of annotations on documents
- ☐ multilingual access
- ☐ personalised information dissemination

Scholnet must be able to serve the needs of any scholarly communities

Serving any community (1)

☐ Generic with respect to the DL content

- Structure of the document
- Organisation of the information space
- Metadata format
- Controlled vocabulary

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Serving any community(2)

☐ Adaptable services

e.g. Search

- Type of search
 - Simple, fielded, cross-language, relevance feedback,....
- Query language
 - Fields, relational operators, allowed terms,....
- Format and organisation of the retrieved records
 - Short, detailed,...ranked,...

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Serving any community(3)

☐ Extensible set of services (Open)

Different communities need their own specific services

e.g.

- Research community: Co-operative work service
- Worldwide community of medicine: Translation service

Two step solution

1. Open Service Management System (OSMS)
2. Generic and adaptable services covering the required functionality



Open Service Management System

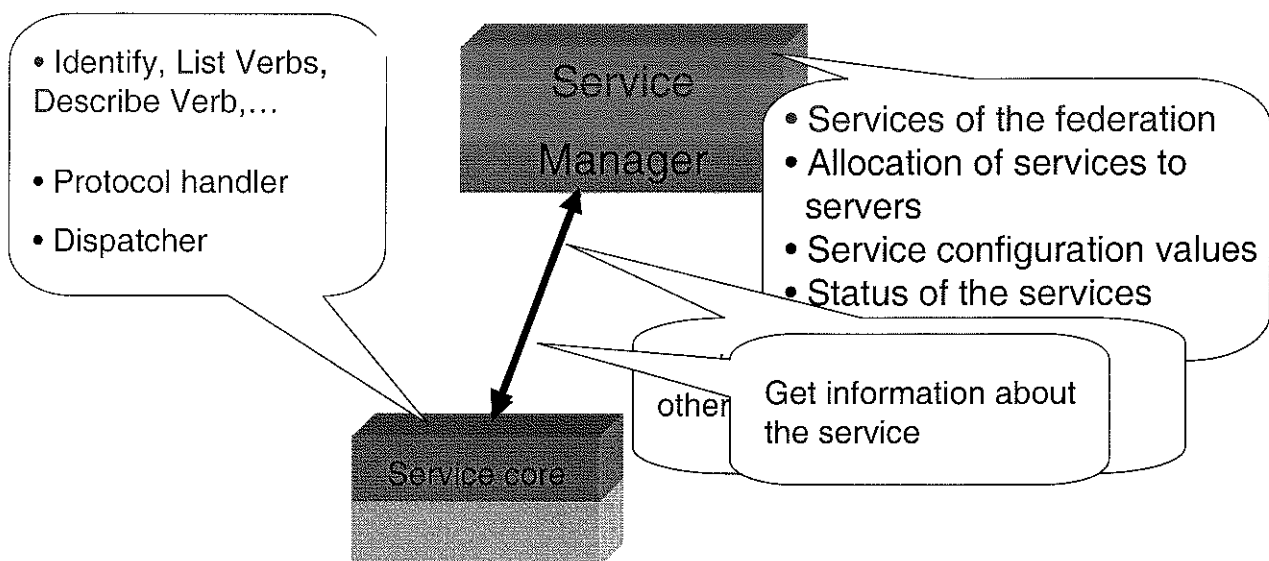
Manager of an open federation of centralised or distributed and/or replicated services

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Open Service Management System

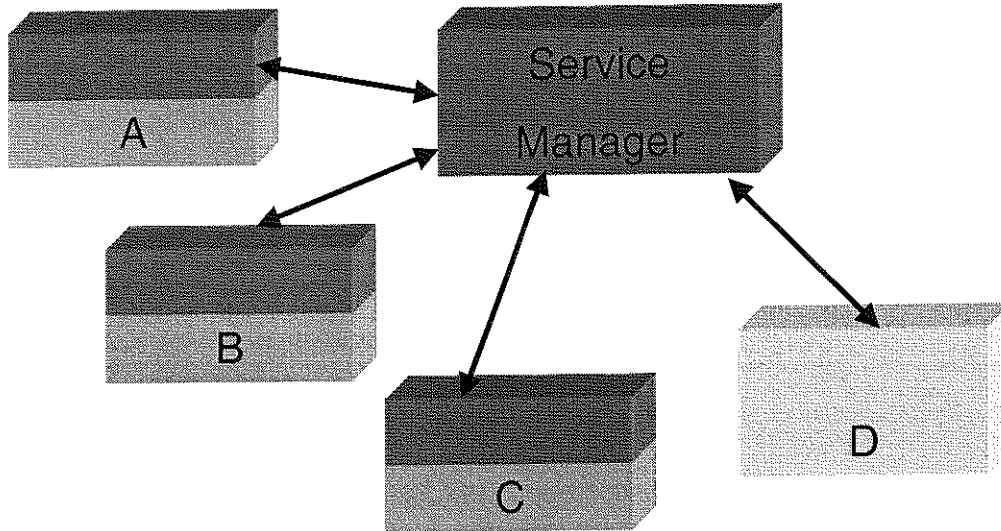


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Building a federation

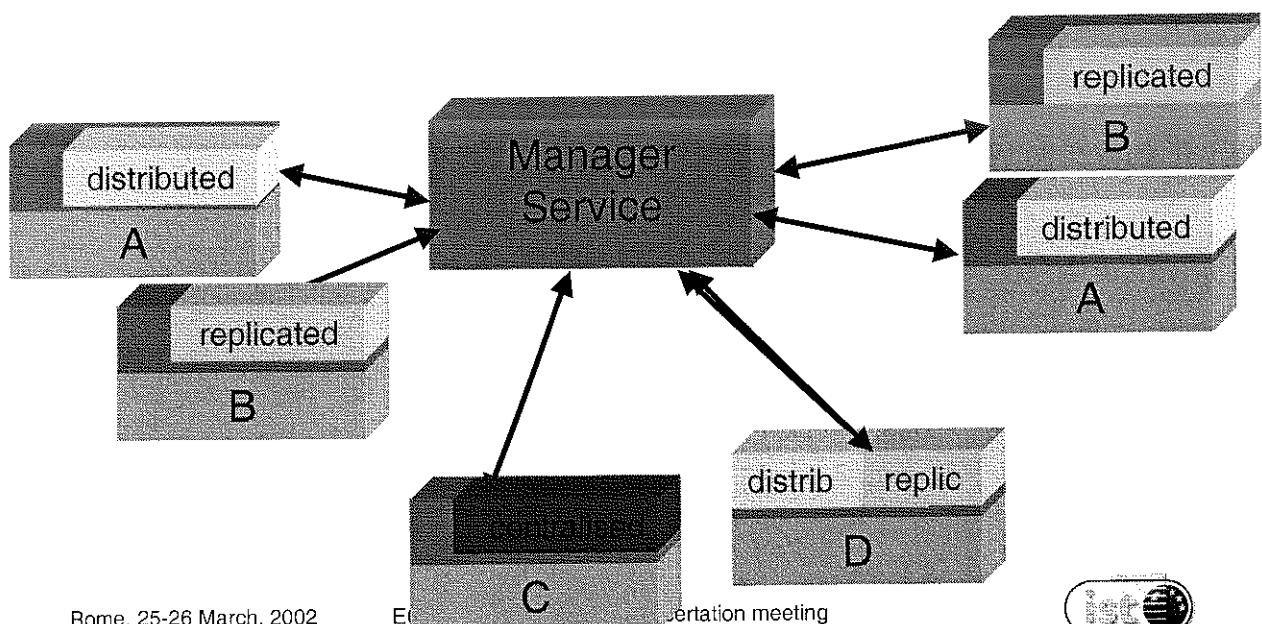


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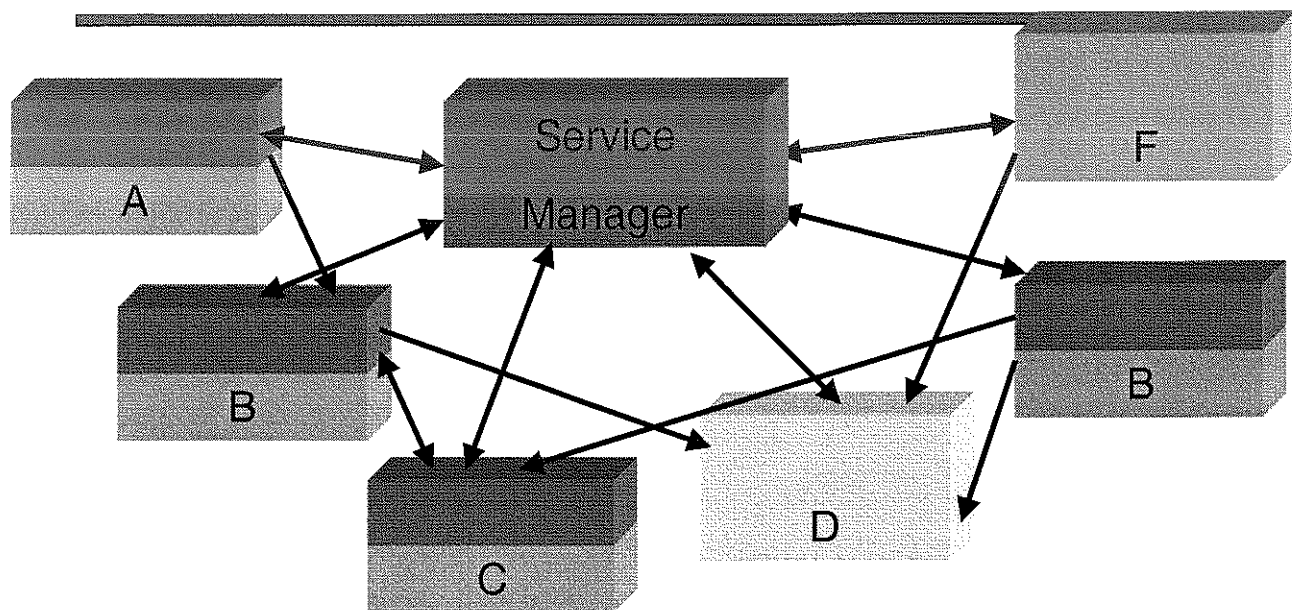
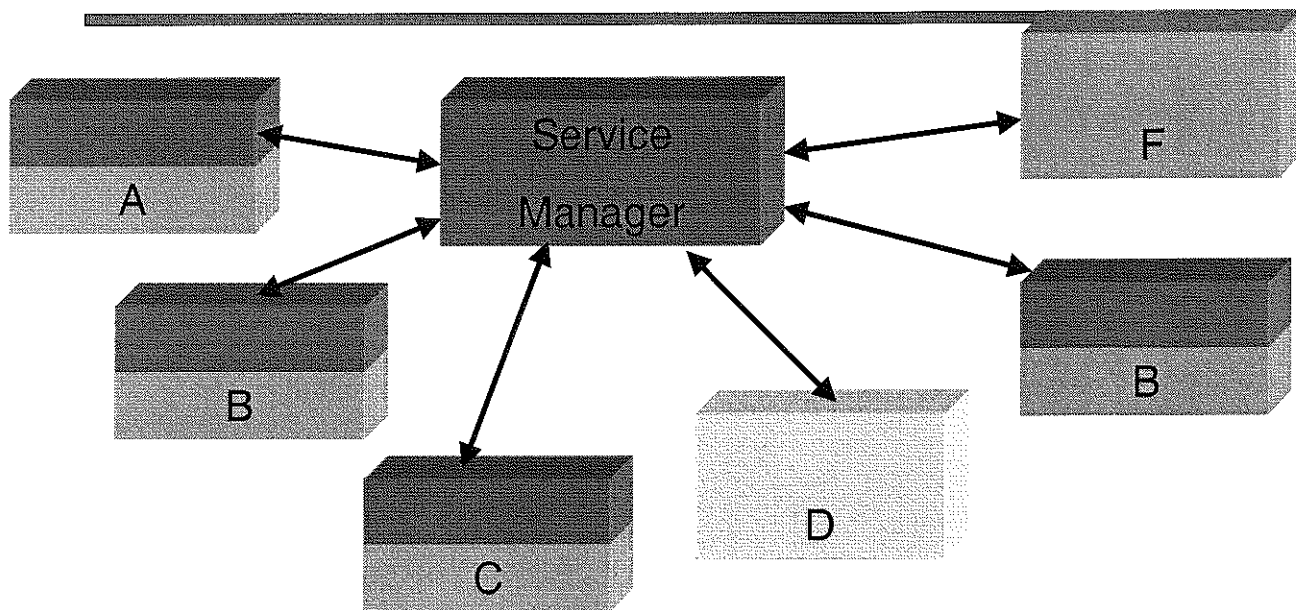
Replication and Distribution



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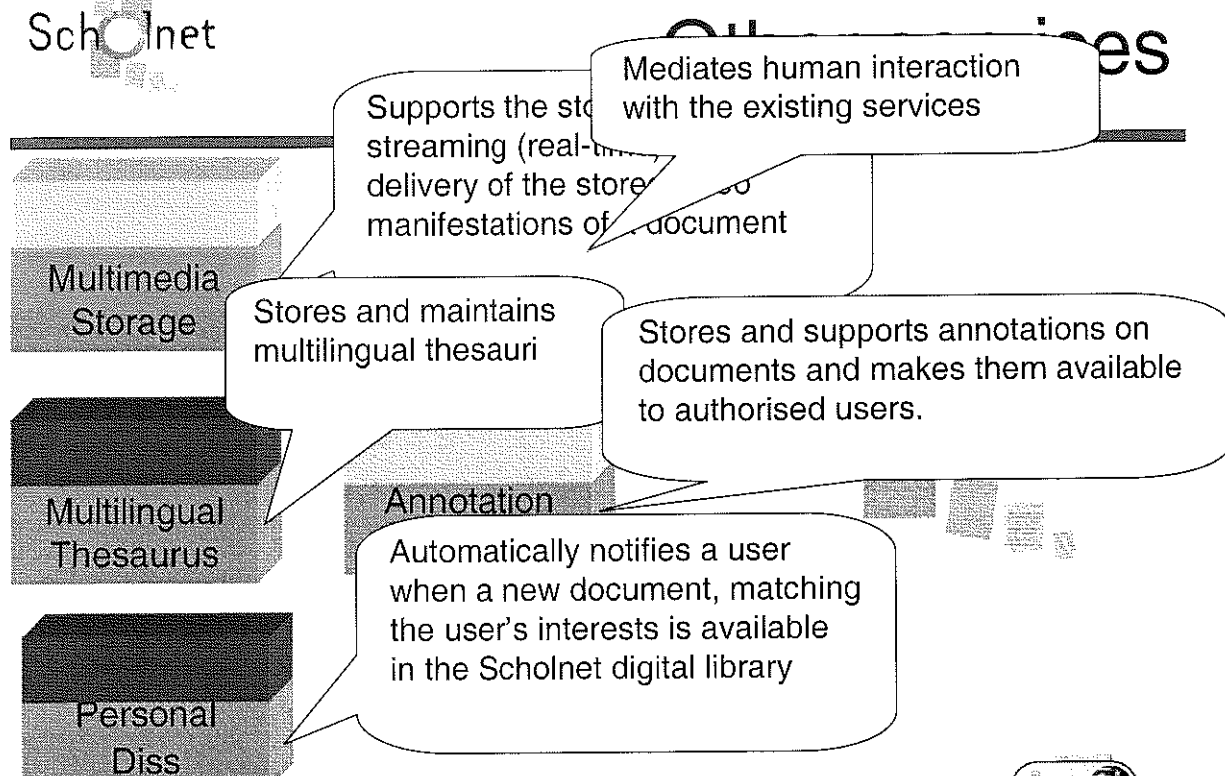
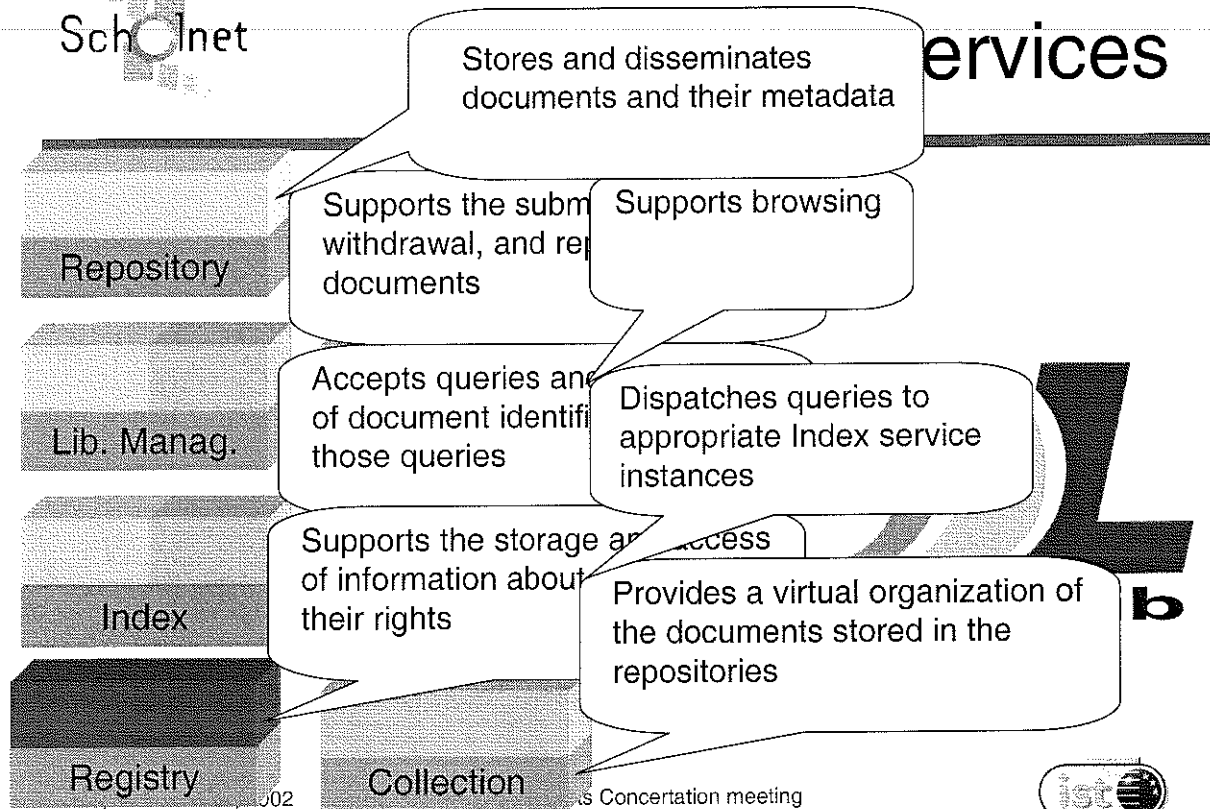


Two step solution

1. Open Service Management System (OSMS)
2. Generic and adaptable services covering the required functionality

DL services system

OSMS has been instantiated with a federation of services which provide the basic digital library functionality



Generic with respect to the content

1. Versatile storage document model

➤ Edition

➤ View

e.g. whole document,
structured document,
annotated document,
summary,...
link-to,

➤ Manifestation

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Generic with respect to the content (cont.)

➤ Part-Of

journal – articles
thesis – chapters - sections
video – scenes - shots
seminar – slides + video

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Generic with respect to the content (cont.)

2. Multiple metadata formats associated with the document and its parts

- A common metadata format is mandatory

Implementation

☐ Protocol

- HTTP(S) embedded
- parameters, results: XML encoded

☐ OSMS, OpenDLib: Apache - ModPerl

☐ Other Scholnet services: different sw choices

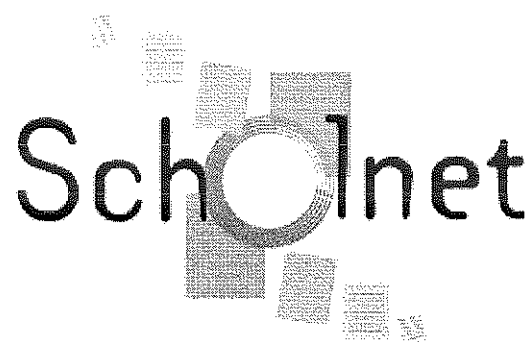


Status of the implementation

- ☐ OSMS: completed
- ☐ OpenDLib, Scholnet: ongoing
- ☐ Scholnet first prototype: completed by
September 2002

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<http://www.ercim.org/scholnet>