

Università di Modena e Reggio Emilia
Corso di Laurea Specialistica in Ingegneria Informatica

DataRiver:
un sistema di integrazione dati Open Source

Relatore:

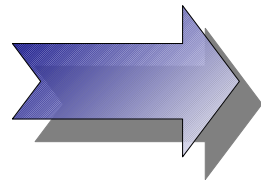
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Candidato:

Francesco Nigro

Anno accademico 2006/2007

Data Integration



MOMIS

Sistema intelligente per l'integrazione di sorgenti di dati eterogenee, strutturate e semi-strutturate

- *DBGroup*
- *10 anni*
- *Java*

The screenshot displays the MOMIS Demonstrator - prova application window. The interface is divided into several panes:

- Global Classes:** A tree view showing a hierarchy of classes including globalSource, Course, Department, Location, Office, Research_Staff, Room, and School_Member, with sub-classes for each.
- Global Interface:** Shows an interface for globalSource.Course with attributes course_name (string) and taught_by (string).
- Not Mapped Attributes:** A pane for attributes not mapped to the interface, currently showing Sources.
- Mapping Table:** A table showing the mapping between source attributes and target classes. The table has columns for source attributes, target classes, and specific attribute values.

Source Attribute	Target Class	Value
course_name	Course	Course(Computer_Science)
course_name		course_name
taught_by		taught_by

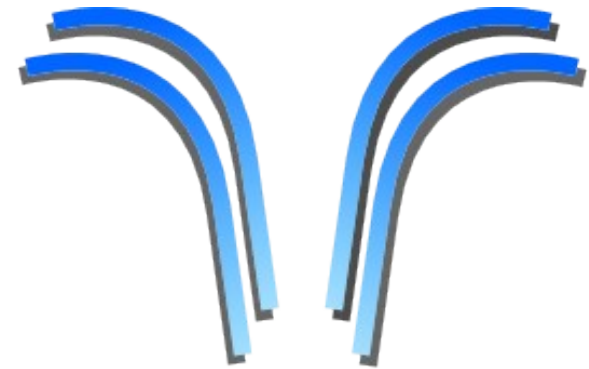
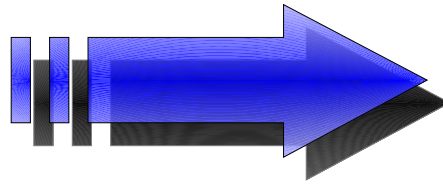
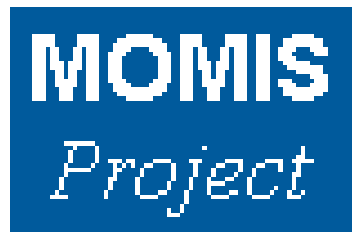
At the bottom of the window, there are buttons for 'LOAD XML STATUS', 'SAVE ALL TO XML', 'SAVE GVV TO XML', 'TRANSFORM GVV TO LOCAL', 'SAVE OPTIONS', 'Help', 'Version', and 'QUIT'.

Obiettivi

- *Open Source*
- *Commercializzazione*



Evoluzione del prodotto

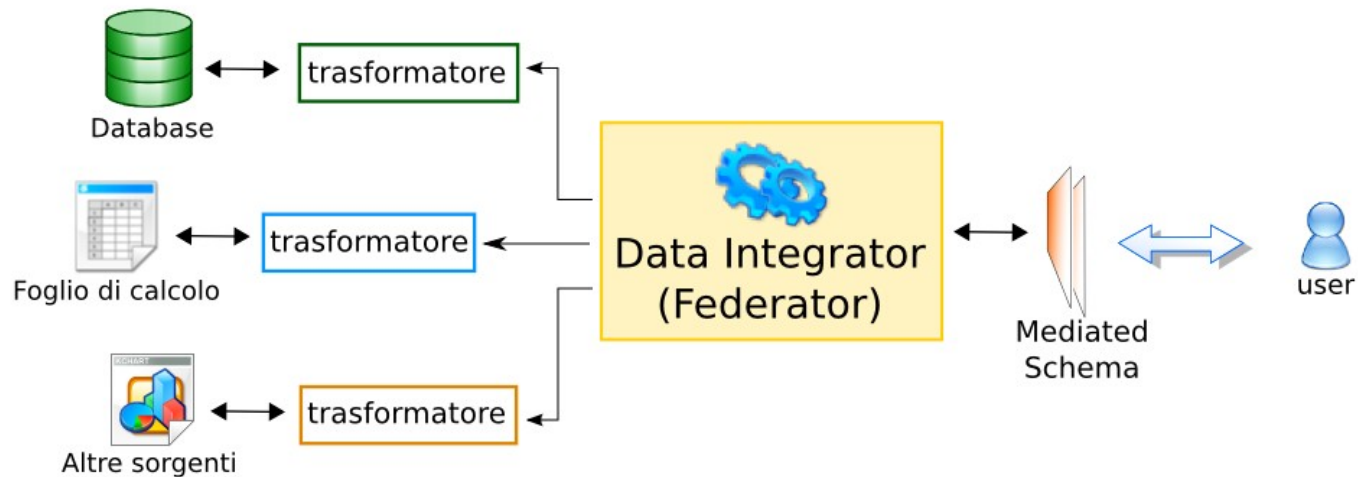
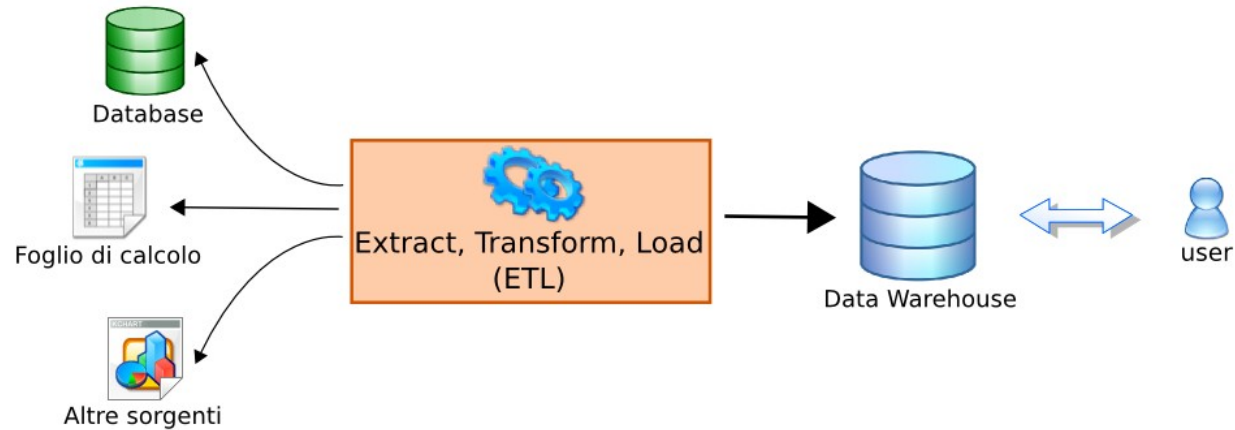


DataRiver

- Proprietario
- Accademico

- Open Source
- Commerciale

Sistemi per la Data Integration



Raggiungimento degli obiettivi

MOMIS
Project

Analisi Architettura



Open Source

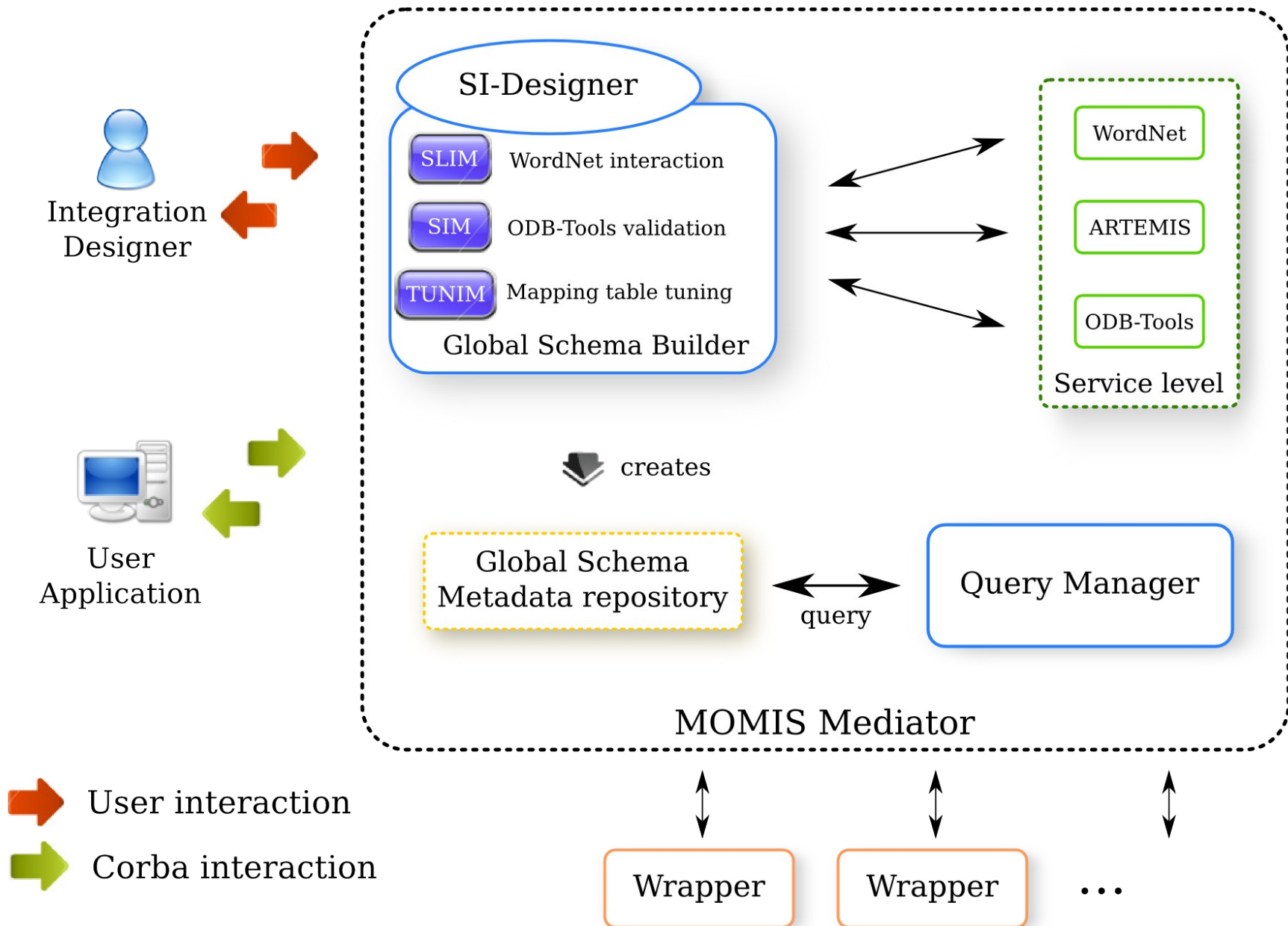
Mercato



Concorrenti Open



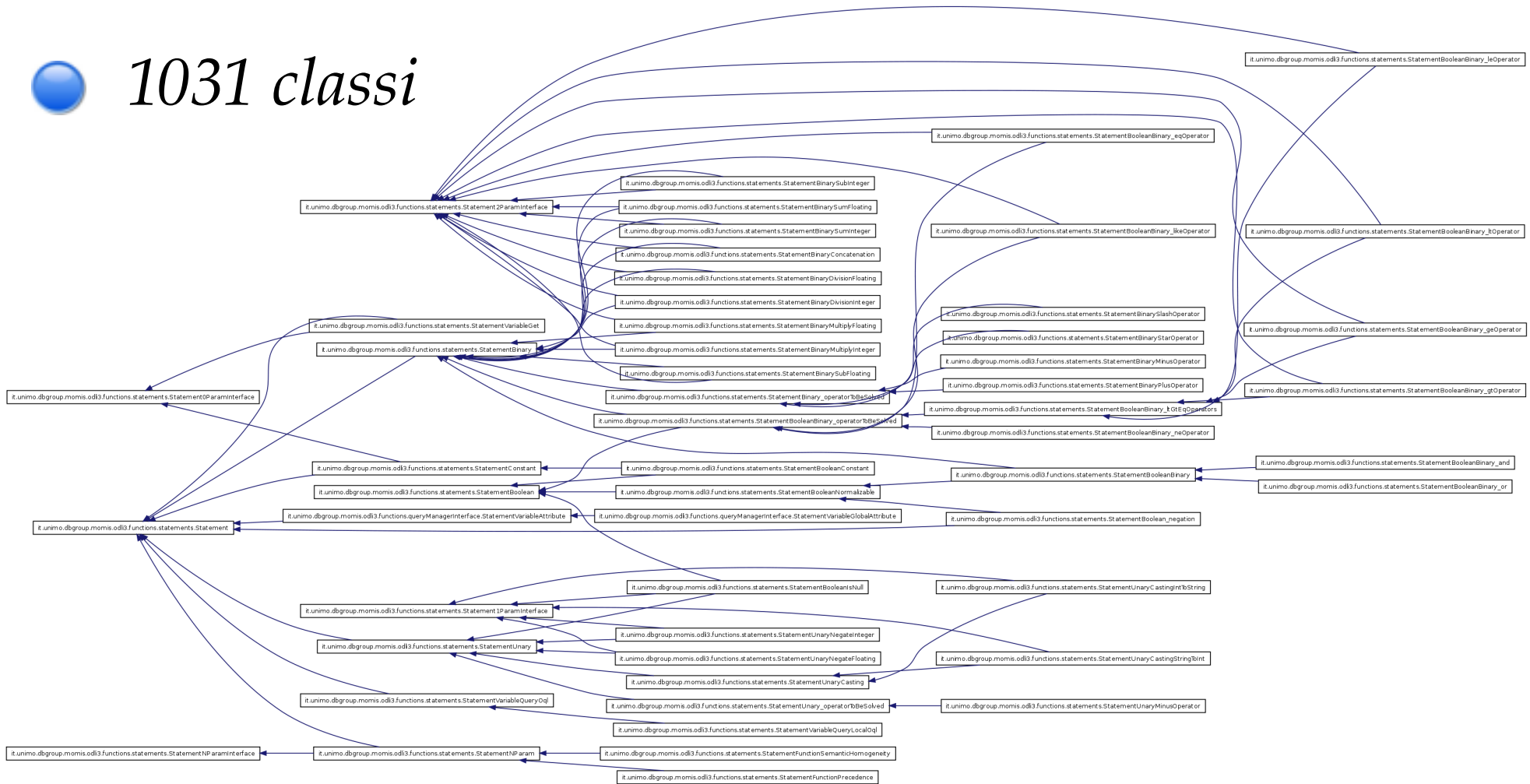
Architettura Funzionale



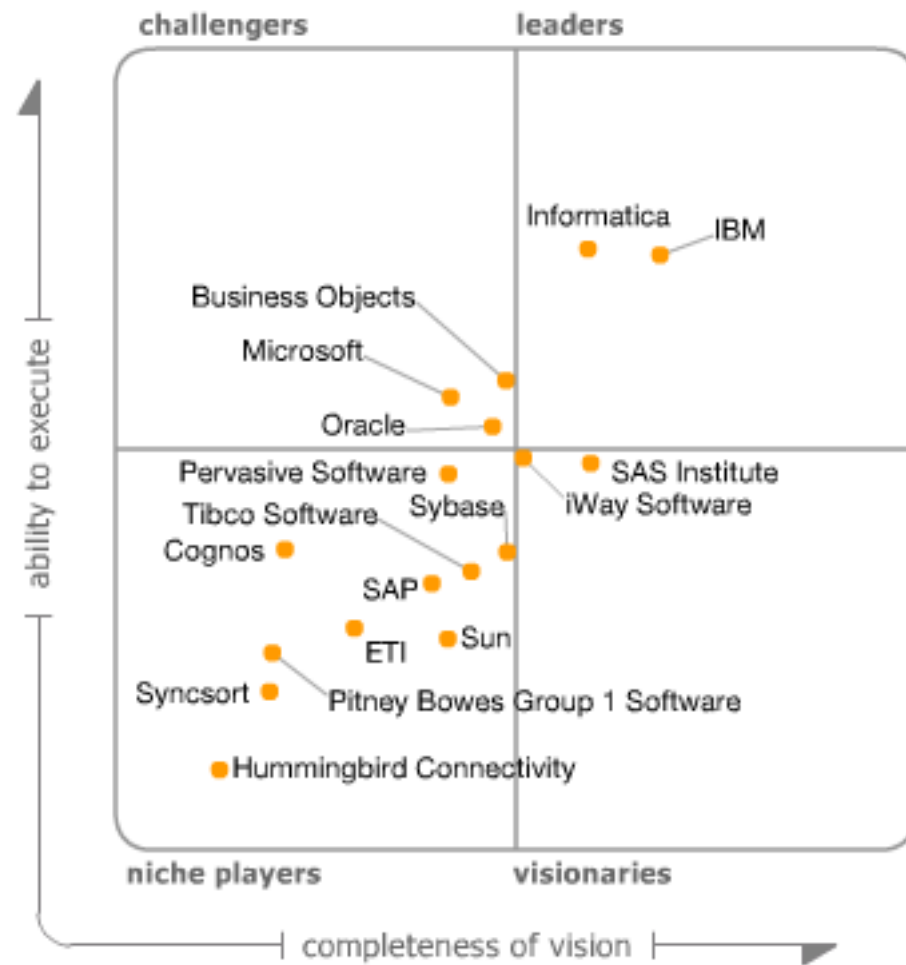
Architettura Applicativa

● 88 package

● 1031 classi



Analisi del mercato



As of October, 2007

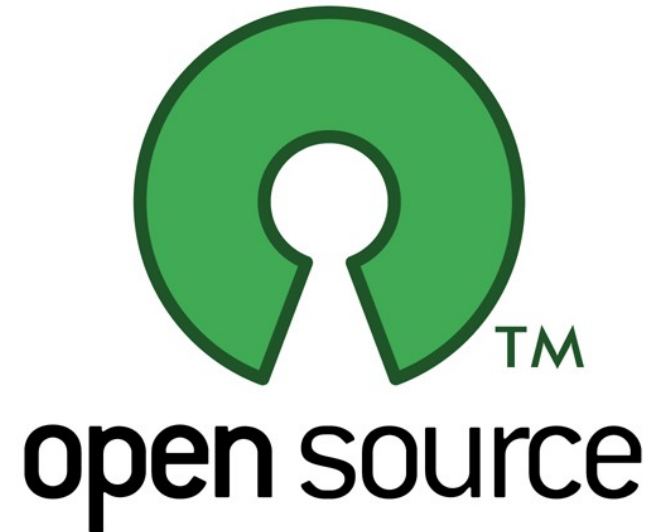
Open Source

- *Codice sorgente disponibile*
- *Libertà di modifica*
- *Libertà di redistribuzione*



Mercato Open Source

- *Collaborazione*
- *Riduzione dei costi*
- *Offerta basata sui servizi*
- *Valorizzazione del territorio*



Licenze Open Source

- *GPLv2 e GPLv3*
- *LGPL*
- *GNU Affero*
- *BSD*
- *Apache License*
- *Microsoft Public License*



Vantaggi

- *Miglioramento del codice*
- *Assimilazione di altro codice*
- *Collaborazione sul supporto*
- *Trasparenza verso il cliente*



Diventare Open

- *Analisi del prodotto*
- *Modello economico*
- *Cambio di ottica*
- *Licenza*
- *Costruzione community*



Strumenti per la Community

- *Drupal*
- *Doxygen*
- *BugZilla*
- *CVS*

The screenshot shows the homepage of the DataRiver project. The browser address bar displays <http://dbgroup.unimo.it/datariver/>. The page features a blue header with the DataRiver logo and navigation links for Home, Contribute, and Forum. On the left, there is a 'User login' section with fields for Username and Password, and a 'Request new password' link. Below this is a 'Navigation' section with a 'Recent posts' link and a 'W3C XHTML 3.0' logo. The main content area is titled 'Welcome' and includes a 'What is DataRiver:' section. This section contains a diagram illustrating the DataRiver architecture: a 'USER' interacts with a 'Global Virtual View', which is managed by 'DataRiver'. DataRiver then integrates data from various sources: 'Relational Databases', 'XML Databases', 'Object Databases', 'Text Files', 'XML', 'Office Documents', and 'Other Sources'. Below the diagram, the 'Project history' section describes the project's origins in 1997 under the INTERDATA and D2I projects, and its evolution through the MIMIS, SEWASIE, and MUR projects. The 'People' section identifies the project as an open source initiative. The 'Contribute' section encourages users to view, use, and change the source code. The 'License' section states that DataRiver is an Open Source project released under the GPL version 2 terms. A 'Download PDF' link is located at the bottom right of the page. The footer of the page includes a 'Powered by Drupal' logo.

Sviluppi Futuri

- *Consolidamento del codice*
- *Valorizzazione community*
- *Rilascio del prodotto*





THANKS