



Bise2: Business Information System for Energy and Environment solutions

Scientific Challenge



A scientific challenge invites teams of 3 to 4 scientists to propose innovative research, new or disruptive topics, to lift identified barriers, but also to promote interdisciplinarity and dissemination of information.

The goal of the BISE² project is to propose a generic **Business Information System** that is customizable with rich multimedia services concerning data indexation, storage, enrichment, security and presentation for several domains, and especially for Energy and Environment projects. This project will mix theoretical research fields related to Multimedia Cloud, Big Data, Data Modeling and Reasoning, Information Retrieval and the Semantic Web (e.g., Linked Data and ontologies), as well as concrete application developments with industrials and public institutions.

Context

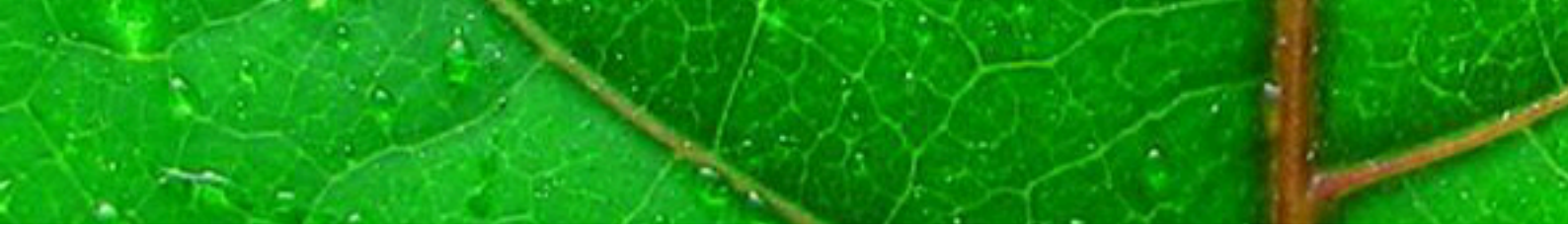
The ever-increasing need for extracting, managing, storing, publishing and retrieving data from heterogeneous contents has become a major concern in modern large-scale projects. This is particularly observed in many application domains where several actors (with different expertise, roles, preferences and rights) **exchange a great amount of information** at any stage of a project.

As an example, in the construction industry, actors (i.e., owners, consultants and contractors) exchange contracts, technical specifications, administrative forms, technical drawings and on-site photos throughout the different stages of a construction process. The interchanged documents, originated from different sources, do not usually have a common standard structure. Also, they show heterogeneity in their formats (e.g., pdf, docx, xlsx, jpeg, etc.), contents (architecture, electrical, mechanical, structure, etc.), media types (image, text, etc.) and versions.

Consequently, there is a crucial need to help any project actors:

- to integrate, to store, to model and to **index large collections of data**, especially multimedia data;
- to **access** data according to specific needs and preferences with a user-friendly system;
- to offer **added-value services**, such as data enrichments and/or data security.

BISE² project leader :



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