

MEDIAGRID: MEDIATION FRAMEWORK FOR TRANSPARENT ACCESS TO DATA SOURCES

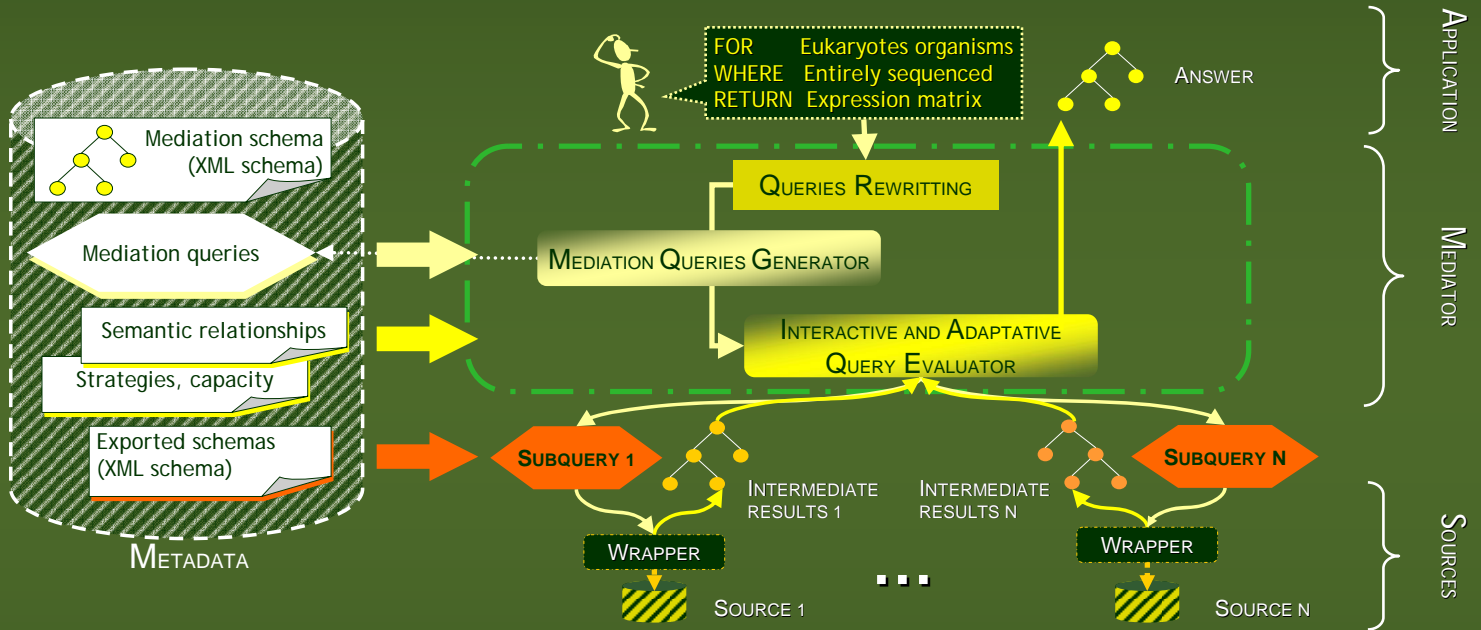
Contact: Christine.Collet@imag.fr <http://www-lsr.imag.fr/mediagrid>

DATA MEDIATION ON THE GRID

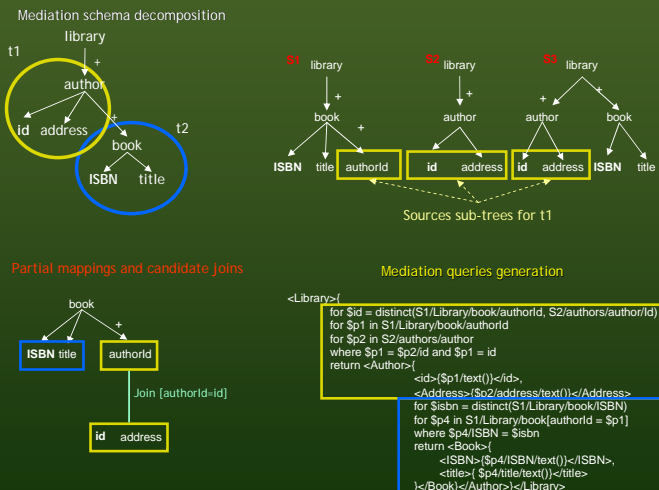
OBJECTIVES

- Increasing number of available sources
- Multiform, loosely and strongly structured data
- Continuous data production
- Partial results in case of sources unavailability
- Efficient evaluation despite complex queries and inconsistent network traffic
- Mediation Query Generation
 - Using schema correspondences
 - Generating candidate mediation queries
- Adaptive and interactive query processing
 - Analysis, rewriting, optimization
 - Adaptive and interactive evaluation
- Phylogeny, functional and comparative genomics

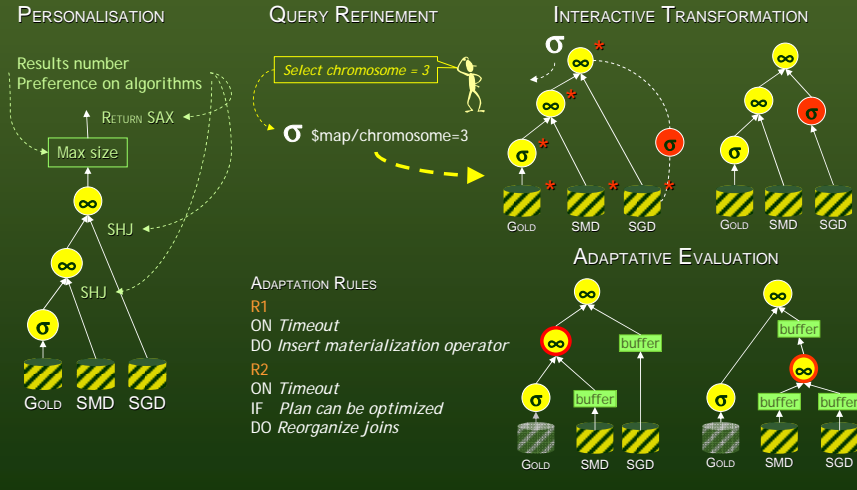
GENERAL ARCHITECTURE



MEDIATION QUERY GENERATION



INTERACTIVE AND ADAPTIVE QUERY EVALUATION



- Decomposing the mediation schema into sub-trees
- Finding **partial mappings** enabling to derive instances of each sub-tree
- Combining the partial mappings to generate **mediation queries**

- Static:** at query evaluator building time
- Personalization:** for each (user) query having specific needs
- Dynamic:** at query evaluation time