**TOULOUSE
TECH
TRANSFER**

n-graph matching:
simplify data integration

Hot topics such as Big Data or Open Data often imply combining many heterogenous data sources into a single data repository. Similar data need to be matched syntactically or semantically, but existing pair-wise schema matching approaches are slow and costly.

COMPETITIVE ADVANTAGES

- Fast single-pass approach
- Avoid most of manual work
- Good matching performance
- Handle large graphs
- No expert tuning required

DESCRIPTION*

- An innovative software to fast match n-graphs
- Single-pass instead of multiple 2-graph matchings:
  - Heterogenous data schemas are converted into graphs
  - Outputs an integrated graph and the underlying matchings
  - Integrated graph is converted into a multidimensional schema
- Maximizes semantic and syntactic similarity
- No threshold tuning required
- Find globally optimal solutions
- User can validate and adjust the proposed solution

APPLICATIONS

- Business Intelligence
- Data warehouse
- Open Data
- Bioinformatics
- Ontology matching

INTELLECTUAL PROPERTY

- Software

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DEVELOPMENT STAGE

- Technology validated at lab level

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

LABORATORY

- SIG team

TECHNICAL SPECIFICATIONS

RAM / CPU	Works on a mid-range laptop
Resolution time	$O(n^4)$: 2 sec. for 1000 node graphs

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