

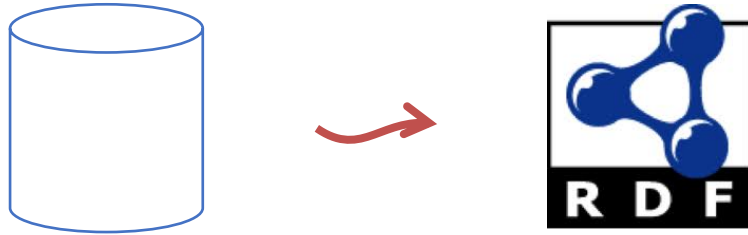
Mayank Kejriwal

University of Southern California

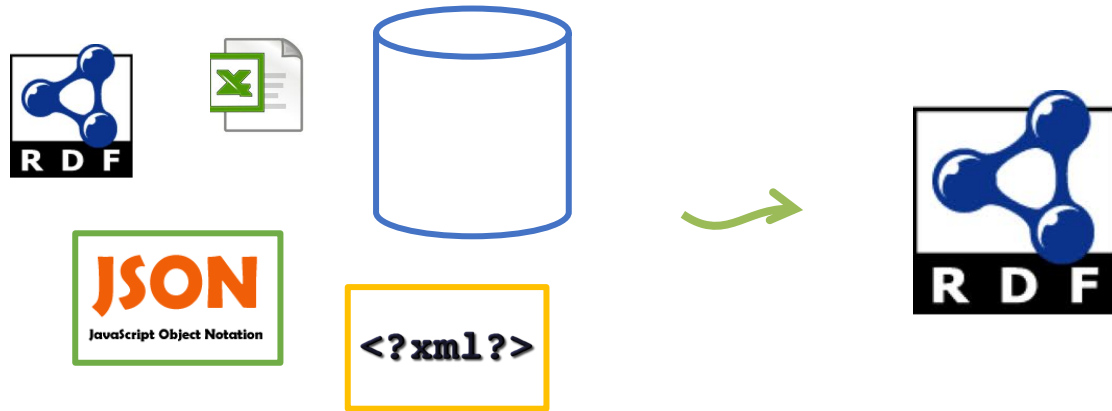
Advanced: RDF Mappings and R2RML

Problem

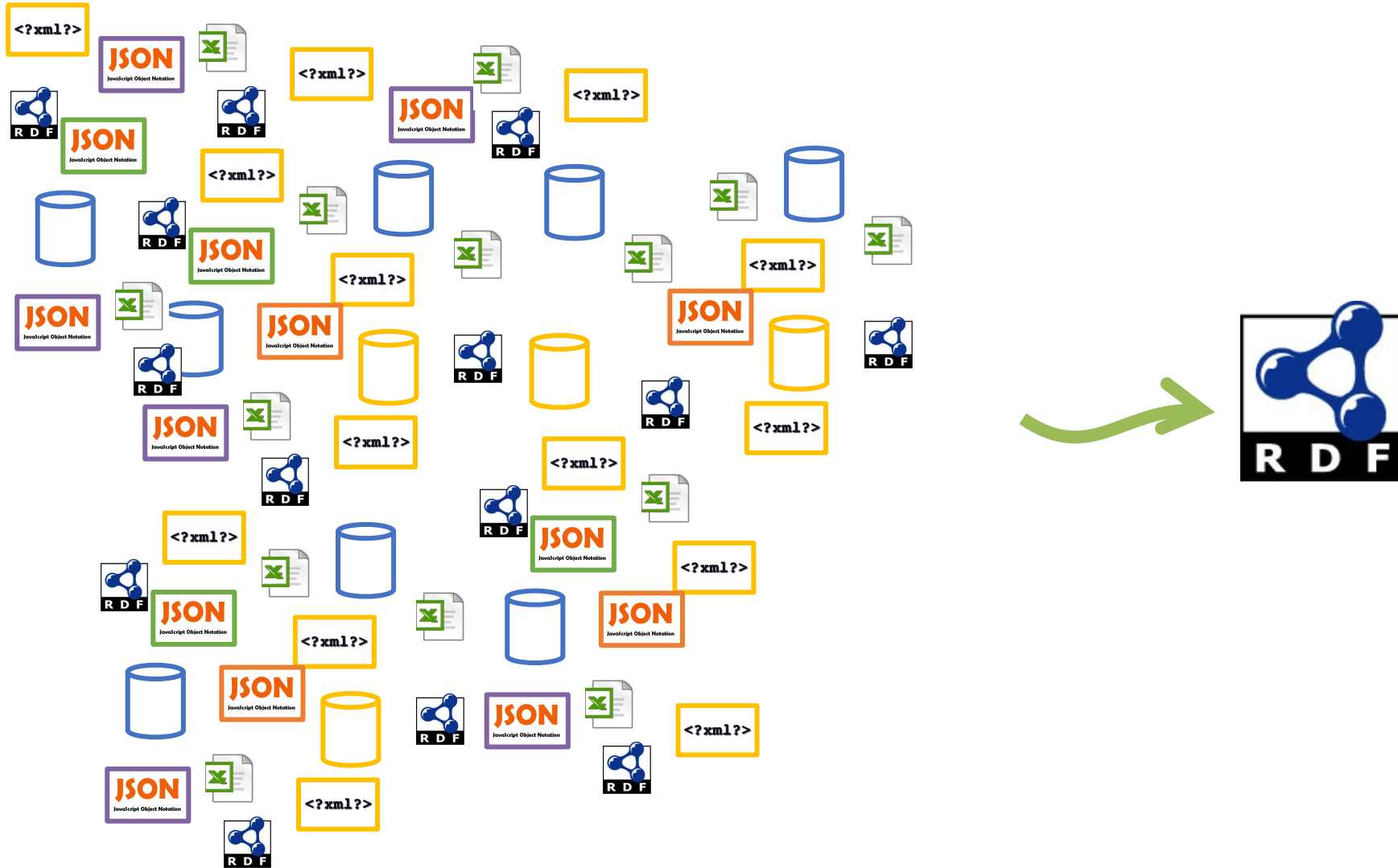
Simple Version of the Problem



Bigger Problem

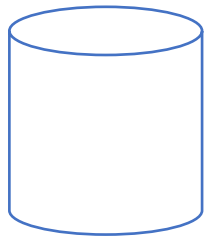


Web-Scale Problem

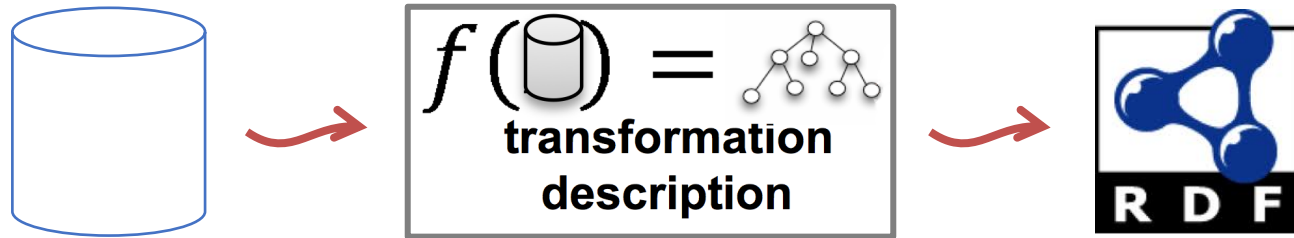


Solution?

Mappings

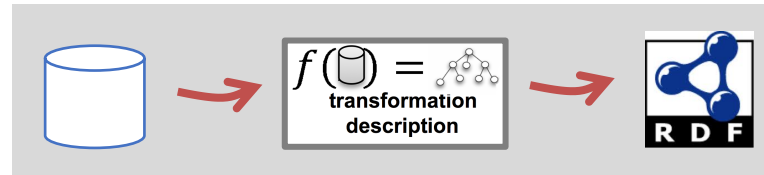


Mappings



Types of Mappings

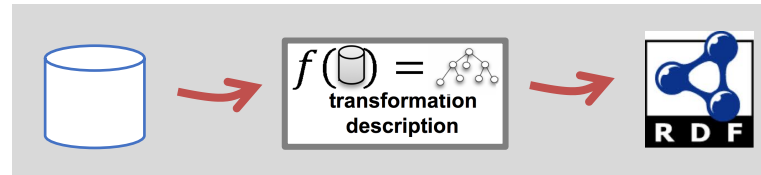
Direct



Structure of RDF
mirrors database
schema

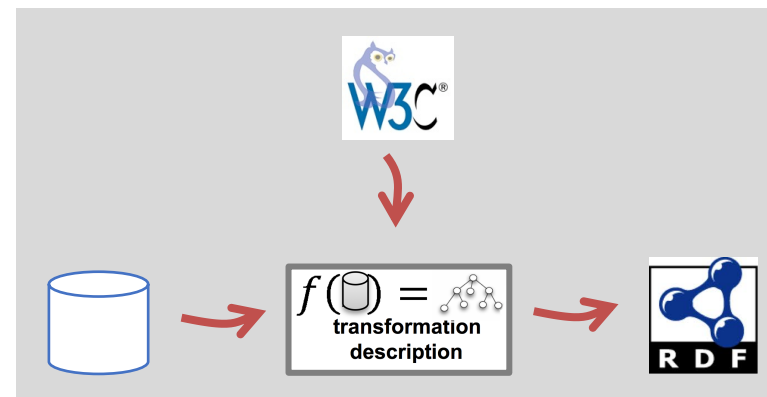
Types of Mappings

Direct



Structure of RDF
mirrors database
schema

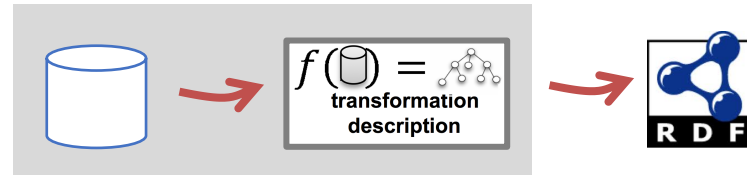
Customized



Structure of RDF
based on a given
ontology

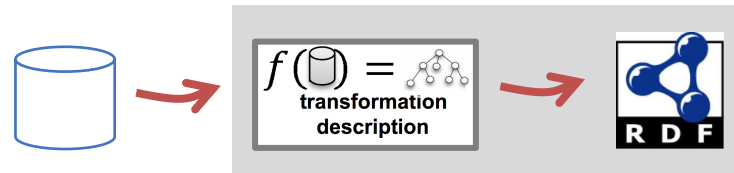
Materialized or Virtual

Materialized



Create a dump of
the database in RDF

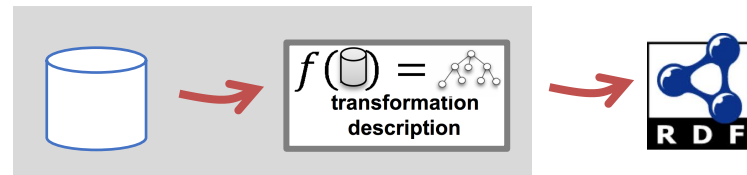
Virtual



Create RDF at
query time

Materialized or Virtual, Which is Better?

Materialized



Create a dump of
the database in RDF

Query Performance

Data Freshness

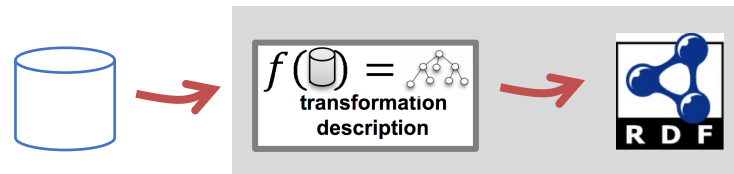
Reliability

Complexity

Scalability

...

Virtual



Create RDF at
query time

R2RML

R2RML

<http://www.w3.org/TR/r2rml/>

R2RML: RDB to RDF Mapping Language

W3C Recommendation

W3C Recommendation 27 September 2012

This version:
<http://www.w3.org/TR/2012/REC-r2rml-20120927/>

Latest version:
<http://www.w3.org/TR/r2rml/>

Previous version:
<http://www.w3.org/TR/2012/PR-r2rml-20120814/>

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Please refer to the [errata](#) for this document, which may include some normative corrections.

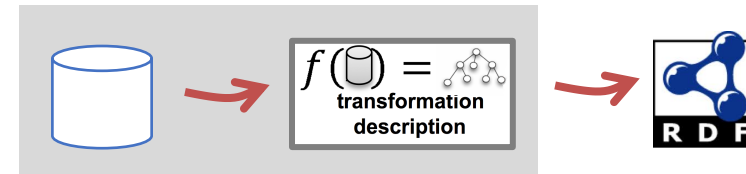
See also [translations](#).

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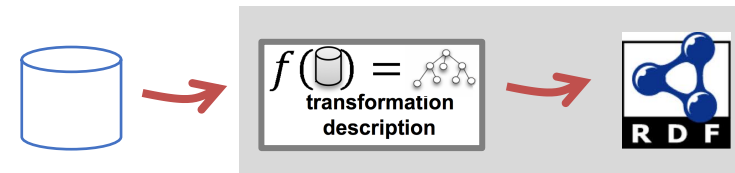
Abstract

This document describes R2RML, a language for expressing customized

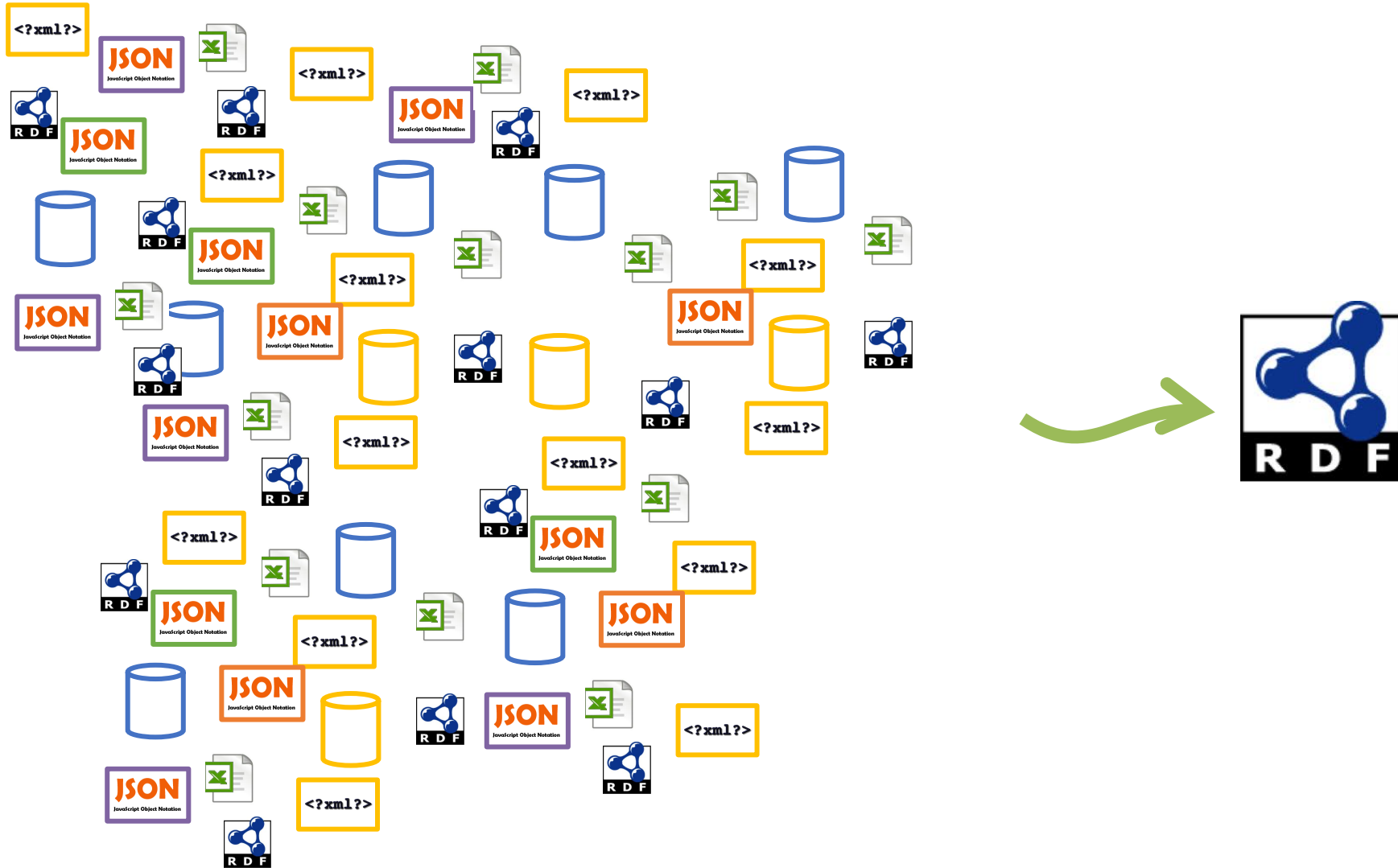
Materialized



Virtual



Web-Scale Problem



Web-Scale Problem

