Linked Data-driven Web Components

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ABSTRACT
This paper provides a ...

1. INTRODUCTION
The

The remainder of this article...

2. RELATED WORK
Web Components and the Semantic Web [1]

3. WEB COMPONENTS
Web Components are a set of W3C standards that enable the creation of reusable widgets or components in Web documents and Web applications. Web components aim to bring *Component-Based Software Development* (CBSD) to the World Wide Web. Some advantages of CBSD approach are reusibility, replacability, extensibility, encapsulation and independence.

4. LINKED DATA-DRIVEN WEB COMPONENTS
Definition

We define a *Linked Data-driven Web Component* as a Web component which employs RDF data model for representing its content and specification (i.e. metadata about the component).

4.1 Features
Linked Data-driven Web components provide the following features:

Fine-grained Web applications

- component architecture

- access control

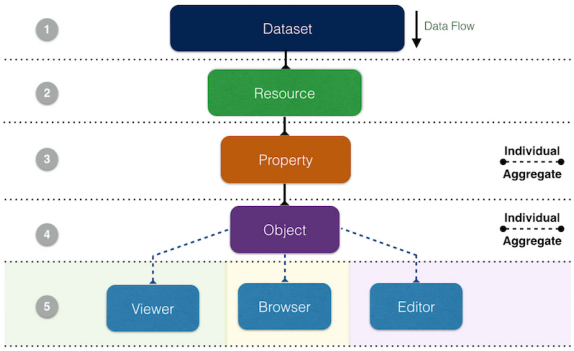

Figure 1: Architecture

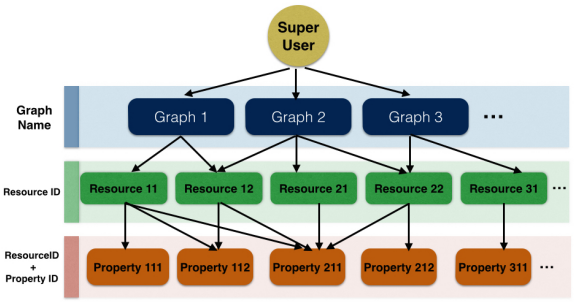

Figure 2: User Access Levels

Customization and Personalization

- scopes

Better content visibility reusability

- RDFa, Microdata

Better component visibility, reusability and assembly

4.2 Life Cycle
5. IMPLEMENTATION
http://ld-r.org

6. EVALUATION
RISIS

OpenPhacts

Figure 3: Scopes

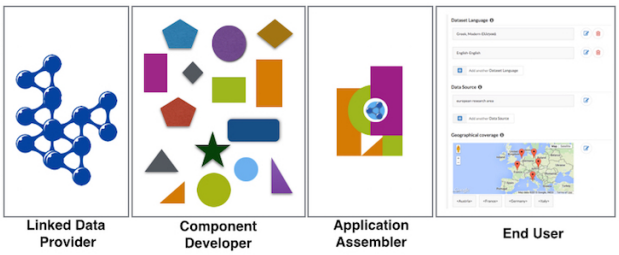

Figure 4: Life-cycle

7. CONCLUSION AND FUTURE WORK

8. AKNOWLEDGEMENT

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9. REFERENCES

[1] M. Casey and C. Pahl. Web components and the semantic web. *Electr. Notes Theor. Comput. Sci.*, 82(5):156–163, 2003.

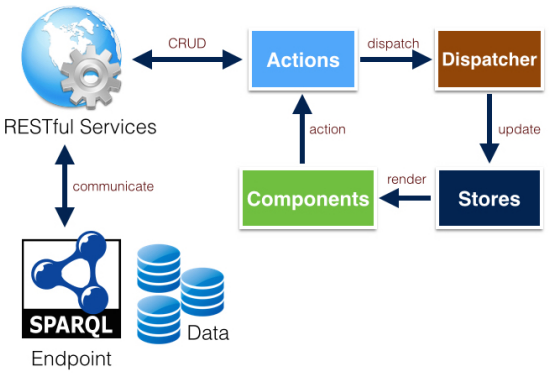

Figure 5: Data Flow

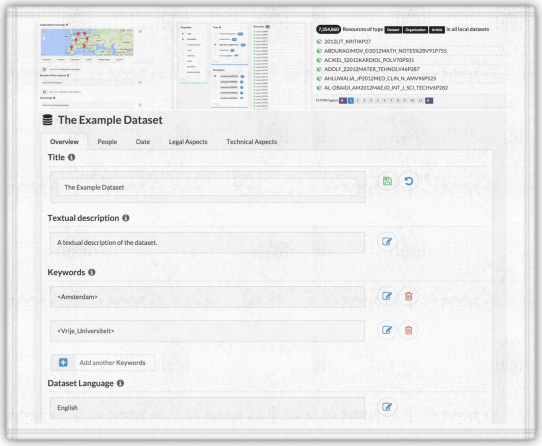

Figure 6: Screenshot