

Linked Data-driven Web Components

Ali Khalili
Dept. of Computer Science
VU University Amsterdam
The Netherlands
a.khalili@vu.nl

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 reusability, replacability, extensibility, encapsulation and independence.

4. LINKED DATA-RIVEN 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

Fine-grained Web applications

- component architecture

- access control

Customization and Personalization

- scopes

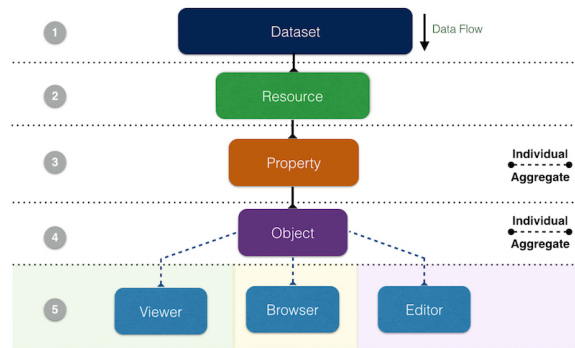


Figure 1: Architecture

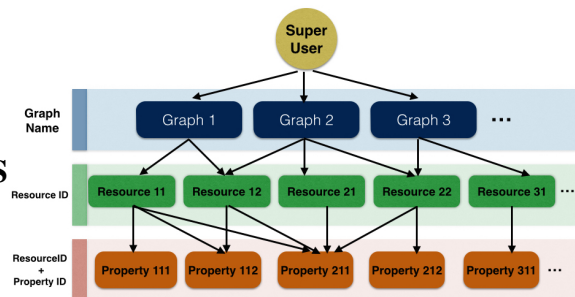


Figure 2: User Access Levels

Better content visibility reusability

- RDFa, Microdata

Better component visibility, reusability and assembly

4.2 Life Cycle

5. IMPLEMENTATION

<http://ld-r.org>

6. EVALUATION

ISIS

OpenPhacts

7. CONCLUSION AND FUTURE WORK

8. AKNOWLEDGEMENT



Figure 3: Scopes

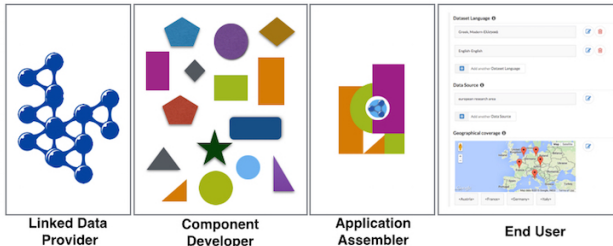


Figure 4: Life-cycle

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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.

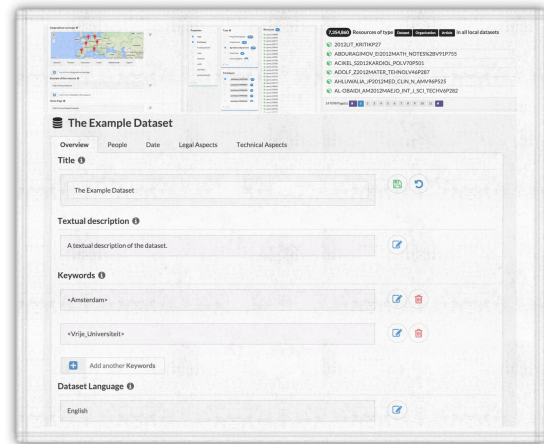


Figure 6: Screenshot

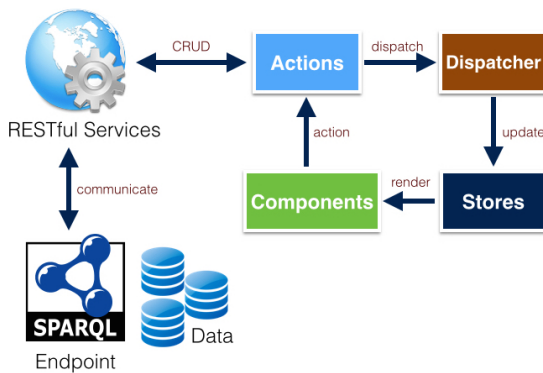


Figure 5: Data Flow