Wiki4EAM – Using Hybrid Wikis for Enterprise Architecture Management

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1. Motivation

Enterprise architecture management (EAM) is a challenging task, modern enterprises have to face. This task is often addressed via heavy-weight and expensive EAM tools to collect, structure, visualize and analyze architectural information. A major problem in EAM is the mismatch between the existing unstructured information sources and the rigid information structures and collaboration mechanisms provided by today's EAM tools.

To address this mismatch, researchers at Technische Universität München established in 2010 a community of experienced enterprise architects from 25 large German enterprises to pursue a different, **wiki-based approach to EAM** [3]. The idea is to start with existing unstructured information sources captured as wiki pages (e.g., derived from Office documents) and then to incrementally and collaboratively enrich the wiki pages with attributes, types and integrity rules as needed for architecture modeling, visualization and analysis [1].

An off-the shelf commercial enterprise wiki (Tricia by infoAsset AG [4]) provides the required incremental information structuring capabilities as so-called Hybrid Wikis. Customizable in-browser visualizations are provided by the System Cartography Tool developed at Technische Universität München [2].

2. Demo Outline

Architectural information (in anonymized form) from the Wiki4EAM community members will be used to demonstrate typical EAM use-cases using Hybrid Wikis:

- Full-text and structured search, tagging, linking, input completion, WYSIWYG editing, discretionary and role-based access control.
- Incremental (emergent) information structuring with attributes, formats, types, cardinality constraints, and consistency rules with a user interface accessible to business users.
- Customizable generation of in-browser visualizations (cluster maps, matrix maps and graph layouts) based on structured query results.
- Import of and integration with existing architecture-relevant information sources (Office documents, files, databases) in the enterprise.
- Open access to architectural information (file export, REST API).

3. Expected Benefits for the Audience

- Hands-on and practical information on the use of (semantic) wikis for strategic IT management.

- Experience and challenge a new enterprise wiki with an innovative approach to capture emergent information structures.

4. Expected Benefits for Technische Universität München and infoAsset

- Expert feedback on this application area for enterprise wikis and on the underlying wiki platform: new ideas, suggestions for improvements, critique, pointers to related work.
- Getting in touch with the international WikiSym community
- Contact to international organizations that would like to participate in the Wiki4EAM community and provide feedback.
- Contact to US researchers, potential customers and partners or even investors

5. References

[1] Matthes F.; Neubert C.; Steinhoff A.: Hybrid Wikis: Empowering Users to Collaboratively Structure Information. In: 6th International Conference on Software and Data Technologies (ICSOFT), Seville, 2011.

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