Updating:: WikiTags

Connecting Microsoft Office applications to Semantic MediaWiki

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SMWCon Fall 2010, Open University, Amsterdam, NL
SMW:: powerful tools *and* contents

Semantic MediaWiki and related extensions have more potential power.
Need Release :: The (more) Power

- Be used by more people
- Content in more places
- Accessible via more applications
- Enhanced with more semantics

The more users The better

TO THE PEOPLE
Need :: **Workflow Integration + Usability Enhancements**

- **Infrequent** Wiki users *frequently* forget where the wiki pages are located
- Search is a **break** from current workflow
- Search result can be **noisy** or **irrelevant**
- **Usability:**
  - Wiki/Template/SF markup syntax is not extremely hard, but enough to turn off many users
  - To locate and consume info in SMW is just not easy enough, **need something better**
- **Why don’t we leverage Microsoft Office suite?**
Microsoft Office ::

The Most Popular Productivity Suite

- 500m users worldwide
- >90% market share
- Users live in the “suite”
- Outlook always open
- Potential for SMW
**WikiTags :: How It Works**

- Leverage Microsoft SmartTags technology
- Bring SMW info to Office applications on-demand
- API for semantic data I/O
- Utilize semantics to improve relevance
- Smart actions for semantic properties
Before the demo, let’s look at

SOME SEMANTIC WIKIS

For more info, go to http://wiking.vulcan.com/dev/
Wiki:: Semantic Sci-Fi Movie

Familiar content just like another wiki

Semantic markups shown in fact box
Wiki:: NGT - Proposal Handling

Edit Proposal: Doghouse

**Warning:** You are not logged in. Your IP address will be recorded in this page's edit history.

Doghouse

For the longest time, the small dog called a small cardboard box home. This is unacceptable. The house should be made of wood, or perhaps titanium.

**Contents**

- [ ] Implementation ideas
- [ ] Summary
- [ ] Cost estimate
- [ ] Timeframe
- [ ] Requirements
- [ ] Timeline
- [ ] Notes
- [ ] Net cost

**Why should this be developed or researched?**

To create world peace

**Describe any known costs to develop this project**

Estimate how much it may cost: $2,500 USD. Many things:

- Materials
- Time to buy materials
- Design
- Review
- QA

**Required timeframe for completion if known**

2008/06/16

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**Proposals Visualized**

The curve is for cost; the span is about how long it takes, and the horizontal line indicates when the proposals were submitted. Click on the dot (or the vertical line) you'll see the detailed description of each proposal.

- **Doghouse**
  - **Cost estimate:** $2,500
  - **Submitted on:** 15 May 2009
  - **Submitter:** Dennis Schnieder
  - **Timeframe:** 16 August 2009
  - **Summary:** Small dog, big house

This page was last modified on 14 May 2009.
Wiki :: Agile Project Management

- Project Wiki for Milestones, User Stories, Developer Tasks, etc.
- Page is form-based, with queries and semantics built-in
Now see the demo

LIVE ACTIONS

For more info, go to
http://wiking.vulcan.com/dev/
Backstage::WikiTags Extension

- Wiki Validation
- Authentication
- To get the categories
  - And descriptions
- To get the article titles
- To get the semantic properties
- To get page info
- Get all available forms
- Save page as a form
- Save page with dataset
- Set form of a page
- Create form templates
- To upload into the Wiki

http://wiking.vulcan.com/dev/index.php/SMW_Webservice_APIs
Backstage:: Semantic Connector

- Extension to facilitate semantic data exchange
- Web UI to make semantic schema mapping for semantic wiki templates and forms
- Web service APIs to do the same
Special:ApiTest :: Results in JSON

REST Sandbox

```
[{
  type: "same as",
  src: "Developer.Team member.address",
  map: "Outlook Wiki Contact.Outlook Wiki Contact.BusinessAddress"
},
{
  type: "same as",
  src: "Developer.Team member.city",
  map: "Outlook Wiki Contact.Outlook Wiki Contact.BusinessAddressCity"
},
{
  type: "same as",
  src: "Developer.Team member.company",
  map: "Outlook Wiki Contact.Outlook Wiki Contact.CompanyName"
},
{
  type: "same as",
  src: "Developer.Team member.country",
  map: "Outlook Wiki Contact.Outlook Wiki Contact.BusinessAddressCountry"
},
{
  type: "same as",
  src: "Developer.Team member.department",
  map: "Outlook Wiki Contact.Outlook Wiki Contact.Department"
}
]```
RECAP OF DEMO

For more info, go to http://wiking.vulcan.com/wikitags/

What to take away from the demo
Semantic Info:: Across Office Apps

Dynamic Query Results from the article page

Multiple Wiki Sites supported

Excel

Via SmartTags, WikiTags recognizes smartly the keywords or phrases relevant to you
Semantic Info: **Smart Match**

- Stemming and Stopword list support, Similarity threshold*

Configuration via Wiki UI and LocalSettings

WikiTags Stopword list

To enable or disable WikiTags stopword list filtering, please edit "$IP/LocalSettings.php" and add:

```php
$wgEnableWikiTagsStopword = TRUE; // FALSE;
```

For the stopword list, upload a file named "stopword.txt" under "$IP/images/", each stopword one line, and modify in this special page.

WikiTags stopword filter is **enabled** now.

![Wiki Development Wiki](image)
Semantic Info:: In Real-time

Explore related real-time semantic info across the links in article

See articles in categories live
WikiTags::Semantic Actions

Semantic actions are based on semantic services of properties.
Wiki Forms::: In Microsoft Office

- Read and Write Wiki Content in familiar forms
  - Semantic data in Outlook and Windows form
- Contribute into Wiki articles back
Screenshots: E-Mail into Wiki

Upload Emails into Wiki
- Manual upload
- Automatic upload by folder mapping
- Conflict handling
  - Heuristic category
    - Use recipients, folders and text

Shortcut to create wiki articles

Conflict Resolution

Customize Categories
Bug report: strange text in project task description field in fact box (with attached picture)

Auto generated by Outlook Addin, please don’t modify this page.

From: jesseW@vulcan.com
To: ning@teammersion.com
Cc: justinzh@teammersion.com
Sent: 2009-03-31 03:41:27

Attachment(s)

Here is the URL: http://wiking.vulcan.com/dev/index.php/Specify_Unique_ID_format

Attached is the picture:
Priority=3

Jesse

Facts about Bug report: strange text in project task description field in fact box (with attached picture)
Option to choose categories of interest and more.
WikiTags::Smart Connections

• Consume relevant, targeted information
  – With the tools you are already familiar with
  – In the context – *better relevance and productivity*
  – Only when you need it – *no information overload*
  – In place – *no search overhead to break workflow*
  – In real time – *data from wiki is live*

• Let you contribute to Wiki
  – Without knowing where the content is
  – Without learning *wiki/template* syntax
Thank | Help:: you | me

• For more info: http://wiking.vulcan.com/dev/
• To help us:
  – Use it and let us know what you want
  – Collaboration opportunity
• To contact me:
  – Email jessew@vulcan.com
  – Twitter @aiwang

• Thanks to:
  – Project Halo, Vulcan Inc.
  – Karlsruhe Institute of Technology
  – Ontoprise GmbH
  – TeamMersion LLC
  – All you Semantic Wikiers