SMWCon Fall 2016
September 28 to 30, Frankfurt am Main

Overview and introduction to new semantic extensions

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SMWCon Fall 2016 - New Semantic Extensions

Overview

- Semantic External Query Lookup
- Semantic Notifications
- Semantic Scribunto
- Summary Cards
- Whats Nearby
Semantic External Query Lookup
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Semantic External Query Lookup

- First released imminent
  - Created by James Hong Kong (MWJames)
  - Requires SMW 2.4 or later (current alpha)
  - Most probably will require SMW 2.5 or later on initial release

- Allows querying external wikis
  - Integrate query results from a remote wiki on a local wiki

- Uses the Ask API of Semantic MediaWiki
  - Needed to access the remote wiki
  - Currently readapi denied wikis are not supported
  - Files can only be displayed as links
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Semantic External Query Lookup

• Example annotation on remote wiki:
  - SMWCon Fall 2016

    {{#set:Has planned start=2016/09/28}}
    {{#set:Has planned finish=2016/09/30}}
### Semantic External Query Lookup

**Composer**

```php
// $smwQuerySources = array(
    'smworg' => 'SMWExternalQueryLookup',
);
```

**$seqlgExternalRepositoryEndpoints = array(**

```php
    'smworg' => array(
        'https://www.semantic-mediawiki.org/w/index.php/$1',
        'https://www.semantic-mediawiki.org/w/api.php',
        true
    )
);
```

- **unique key (= interwiki prefix)**
- **name of corresponding query processor**
- **interwiki URL**
- **interwiki API**
- **local interwiki?**
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Semantic External Query Lookup

• Example query on local wiki:

```{{#ask:
[[SMWCon Fall 2016]]
|?Has planned start{-#F[Y-m-d]=start date
|?Has planned finish{-#F[Y-m-d]=end date
|source=smworg
|mainlabel=conference
|headers=plain
}}```
Example result on local wiki:
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Semantic External Query Lookup

• Repository
  https://github.com/SemanticMediaWiki/SemanticExternalQueryLookup

• Documentation
  - /README.md
  - /RELEASE-NOTES.md
  - /docs/00-configurations.md

• Video
  https://youtu.be/sOCh9M2sSvU
Semantic Notifications
First release imminent
- Created by James Hong Kong (MWJames)
- Requires SMW 2.4 or later

Allows for notifications about changes to structured data:
- Was the setup of a category or property changed?
- Was a page added to a category?
- Was a value added to a property?
● Makes use of the Echo extension
  – Getting the notification to the individual users
    • On wiki
    • Via e-mail (not yet working)
  – Provides user preference settings
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Semantic Notifications

- Uses several special properties
  - Needed to define the notification recipients
    - User page = “Notifications group member of”
    - Property/category page = “Notifications to group”
  - Needed to specify the trigger on notifications
    - Specific values or all values = “Notifications on”
Example setup:

- Property page “Project status”

This is a property of datatype `[[Has type::Text]]`. Allowed values for this property are:
* `[[Allows value::started]]`
* `[[Allows value::in progress]]`
* `[[Allows value::completed]]`
* `[[Allows value::in-budget]]`
* `[[Allows value::over-budget]]`

```{#subobject:
  |Notifications on=started,in progress,completed|+sep=,
  |Notifications to group=project member group, project management group|+sep=,
}
```

```{#subobject:
  |Notifications on=over-budget
  |Notifications to group=project management group, project controller group|+sep=,
}
```
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Semantic Notifications

• Example setup cont.:
  - User page “Karsten Hoffmeyer”
    
    This user belongs to the [[Notifications group member of::project member group]].

  - Wiki page “Project SMWCon”
    
    {{PAGENAME}} is currently [[Project status::in progress]].
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Semantic Notifications

Example result:
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Semantic Notifications

• Repository
  https://github.com/SemanticMediaWiki/SemanticNotifications

• Documentation
  - /README.md
  - /RELEASE-NOTES.md
  - /docs/README.md
  - /docs/01-workflow.md
  - /docs/02-tips.md
  - /docs/...
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Semantic Scribunto
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Semantic Scribunto

- First released imminent
  - Created by James Hong Kong (MWJames)
  - Requires SMW 2.3 or later

- Provides native support of Semantic MediaWiki to the Scribunto extension
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Semantic Scribunto

- Probably a bit esoteric for non-programmers

- Used with the #invoke parser function

- Provides two functions
  - `mw.ext.swm.getQueryResult` returns the same serialization format as the API module “api.php?action=ask”, i.e. json
  - `mw.ext.swm.getPropertyType` returns a simple string e.g. “_dat”
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Semantic Scribunto

• Repository
  https://github.com/SemanticMediaWiki/SemanticScribunto

• Documentation
  – /README.md
  – /RELEASE-NOTES.md
  – /docs/invoke.md
Summary Cards
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Summary Cards

- First release imminent
  - Created by James Hong Kong (MWJames)
  - No hard requirement on Semantic MediaWiki

- Allows to display content summaries on hovered links

- Semantic MediaWiki helps generating individual content for the summary cards (e.g. fetch info from a property that contains short description, an image, known keywords, modification date, etc.)
Features

- Uses user defined templates to display the content
- Different templates may be used on a per namespace basis (requires configuration)
- Provides parameters for more efficient creation of templates, e.g. `{{{subject}}}`, `{{{isCategory}}}`, etc.
Features

- Integrates with the `int:` parser function for multilingual capabilities
- Allows for caching to reduce load
- Provides user preference setting (yes/no)
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Summary Cards

• Example template: (just Wikitext, stripped from HTML and CSS)

<!-- IMAGE -->
{{#ifeq: {{isFile}}} | true | [[${{{subject}}}|80px|thumb]] }}{{#ifeq: {{#show: 
{{{subject}}}} |?Has portrait|default=false}} |false | |[[${{#show: {{subject}}} |?Has portrait|link=none|limit=1]}|80px|thumb]] }}

<!-- DESCRIPTION -->
{{#ifeq: {{#show: {{subject}}} |?Has monolingual description|default=false}} |false | |{{#ask:[[-Has monolingual description::{{subject}}]][[Language code::
{{userLanguage}}]] |?Text |link=none |headers=hide |mainlabel=-- }} }}

Subject: {{{subject}}}
{{#show: {{subject}}} |?Has description}
{{#ifeq: {{isProperty}} |true |Type:{{#show: {{subject}}} |?Has type }} }}

User language: {{{userLanguage}}}
Namespace: {{{namespace}}}
isCategory: {{{isCategory}}}
isFile: {{{isFile}}}
Modification date: {{#show: {{subject}}} |?Modification date#LOCL |default=N/A}}
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Summary Cards

Example result:

Search results

Browse wiki

Johann Sebastian Bach (Q1339)

Has common name

Johann Sebastian Bach (Q1339) + Φ

Has description

German composer, organist, harpsichordist, violist and violinist

Has language

en

Has namespace

en

Is a new page

false + Φ

Modification date

22:13:27, 6 April 2016 + Φ

Creator

User:Kghbln + Φ

Modification date

22:13:27, 6 April 2016 + Φ

Is a new page

false + Φ

Categories

Human
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Summary Cards

- **Repository**
  
  https://github.com/SemanticMediaWiki/SummaryCards

- **Documentation**
  
  - /README.md
  - /RELEASE-NOTES.md
  - /docs/01-content-summaries.md
  - /docs/02-template-examples.md
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Whats Nearby
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Whats Nearby

• First release imminent
  – Created by James Hong Kong (MWJames)
  – Requires Maps 3.5+
  – No hard requirement on Semantic MediaWiki

• Provides additional HTML5 geolocation information to templates

• Semantic MediaWiki helps generating distance queries to create adaptive maps
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Whats Nearby

Features

- Display queryable content that depends on variable location information (detectLocation, watchLocation)

- Instantly modify distance queries (@@radius) from a page view that relies on static coordinates

- Generate dynamic queryable location lists via #ask
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Whats Nearby

Features

- Provides the `#nearby` parser function
- Provides geolocation information to user defined templates to display information on locations
- Provides parameters to be used, e.g. `querytemplate`, `detectlocation`, etc.
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What's Nearby

• Example query:

```json
{{#nearby:
  |querytemplate=Local libraries,Point of interest
  |coordinates=47° 37' 13.9368'' N,122° 20' 56.8860'' W
  |radius=300 m
  |interval=450
  |max=10000
  |maps=google\maps
  |detectLocation=true
  |watchLocation=false
  |localCache=300
  |controls=slider
}}
```
Example query template:

Shows libraries from point {{#ask: [[Has coordinates::{{latitude}}],
{{longitude}}]] |limit=1|link=none|default=|searchlabel= }} in a distance of {{radius}} {{unit|}}.

{{#ask:
[[Category:Library]]
[[Has coordinates::{{latitude}}], {{longitude}}] ({{radius}})
{{unit|}}]))
  |?Has coordinates
  |?Has library
  |format = {{maps|}}
  |width=250
  |height=250
  |userparam=|template=Distance Popup
  |default=No location found for the current distance.
}}
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Whats Nearby

- Example result:

## Main Page

Geolocation information is unavailable. Using the default coordinates as fallback.

Latitude: 35° 41' 22.1532" N, Longitude: 139° 41' 30.1416" E, Radius: 1650 m

<table>
<thead>
<tr>
<th>Has sightseeing spot</th>
<th>Has description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tokyo</strong> Hanazono Shrine</td>
<td>花園神社 is a Shinto shrine located in Shinjuku, Tokyo, Japan. This shrine was founded in the mid-17th century...</td>
</tr>
</tbody>
</table>
| **Tokyo** Taisoji | }
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Whats Nearby

• Repository
  https://github.com/SemanticMediaWiki/WhatsNearby

• Documentation
  - /README.md
  - /RELEASE-NOTES.md
  - /docs/01-nearby.md
  - /docs/02-example.semantic.distance.maps.tmpl.md
  - /docs/02-example.semantic.query.tmpl.md