

The New NeIC Wikis

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February 11, 2013

About...

- ... creation of two NeIC wikis to replace the current NDGF wiki.
- ... moving from the Confluence software to MediaWiki.

Outline

About MediaWiki

Authentication and Access Control

Tools for Organizing Content

Moving Existing Content

Discussion

About MediaWiki

MediaWiki...

- ... was written for Wikipedia and first released in 2002.
- ... has gained popularity outside Wikipedia and its sister projects.
- ... is managed by the MediaWiki foundation who also coordinate the many extensions.
- ... is designed to be open both for editors and readers.
- ... is Free Software.

Authentication and Authorization

- ▶ You authenticate with your X509 certificate.
- ▶ The DN is not a usable MediaWiki user name.
- ▶ The CN part of it is neither secure nor usable.

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- ▶ Public wiki: The log-in page is protected by SSL authentication. You click the log-in link to log in.
- ▶ Private wiki: The whole wiki is protected by SSL authentication. You are automatically logged in.

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Therefore,

- ▶ We created two wikis, a public and an internal, and use the PrivatePageProtection extension for fine-grained access.
- ▶ Thus, for the internal wiki, unauthorized users don't have access to the features which potentially leak information.

Access Control, cont.

- ▶ The PrivatePageProtection extension use MediaWiki groups.
 - ▶ New groups are added in the configuration
 - ▶ Membership is edited within the wiki.
- ▶ A page is read and write protected by adding an instruction $\{\{\#allow-groups\ G_1 | \dots | G_n\}\}$ to the page.
- ▶ We don't have full control of write protection which is independent of read protection, but we can...
 - ... create a user group with only read access.
 - ... make some pages editable only by staff.

Namespaces

- ... are not for organizing the main content.
- ... are used for meta-content and wiki user interface.
- ... are accessed as `Namespace:Page Title`.

Some notable namespaces include

- ▶ `Special` — Wiki UI like search, user management, quality control, etc.
- ▶ `Talk` — One for each page, used to discuss issues with the content.
- ▶ `User` — Each user has one for personal content.
- ▶ `Help` — Our documentation of the wiki itself.

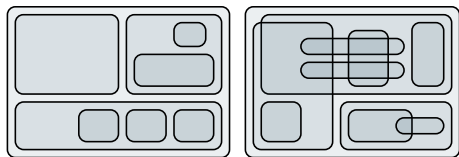
Subpages in MediaWiki

- ... are pages containing at least one slash and which *reside in a namespace where subpages are enabled*. I.e. page titled " $T_1/\dots/T_n$ " is a subpage of " $T_1/\dots/T_{n-1}$ "
- ... are enabled in Talk and User namespaces by default.
 - ▶ Extensively used in current wiki.
 - ▶ Enabled for the main namespace in the new wiki.

Categories

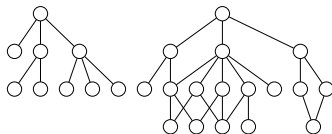
- ... are the default classification tool in MediaWiki.
- ... are sets of pages and other categories.
 - ▶ A page or a category can be members of several categories.
 - ▶ A category can contain content, though this is meant for defining it rather than elaborate content.
 - ▶ A page or category is added to a category by placing a tag `[[Category:Topic]]` in the source.

Subpages vs Categories



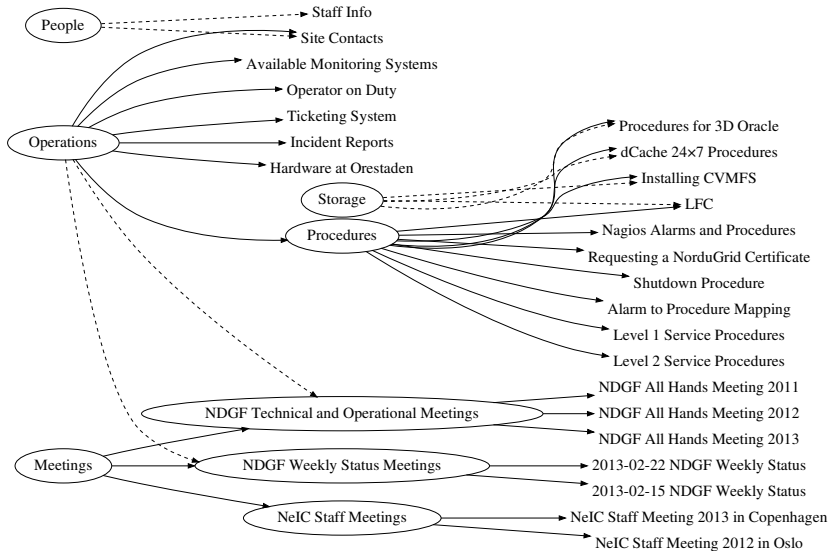
Subpages...

- ... organize the content into a tree.
- ... works as an intrinsic feature of pages.
- ... are encoded in the title; need planning.



Categories...

- ... organize the content into acyclic graphs.
- ... are not regular pages, but can contain free prose.
- ... have minor impact on the articles; can be added at any time.



The Current Content

- ▶ Confluence wiki contains about 11 600 pages. Many meeting pages.
- ▶ Most of it we may want to preserve, but not use time reorganizing.
- ▶ Off-line dump good enough? Or can we convert it?

Confluence Database Dumps

- ▶ Zip archive containing a 139 MiB XML as a single file and 851 attachment files.


```
<?xml version="1.0" encoding="UTF-8"?>
<hibernate-generic datetime="2013-02-06 13:23:31">
  [...]
  <object class="Page" package="com.atlassian.confluence.pages">
    <id name="id">33918872</id>
    <property name="position"/>
    <property name="parent" class="Page" package="com.atlassian.confluence.pages">
      <id name="id">7832011</id>
    </property>
    <collection name="ancestors" class="java.util.List">[...]</collection>
    <property name="space" class="Space" package="com.atlassian.confluence.spaces">
      <id name="id">7864321</id>
    </property>
    <property name="title"><![CDATA[Meeting-2013-02-11 NDGF All Hands Meeting]]></property>
    <collection name="bodyContents" class="java.util.Collection">[...]</collection>
    <collection name="outgoingLinks" class="java.util.Collection">[...]</collection>
    <collection name="referralLinks" class="java.util.Collection">[...]</collection>
    <property name="version">28</property>
    <property name="creatorName"><![CDATA[maswan]]></property>
    <property name="creationDate">2012-12-11 16:48:34.000</property>
    <property name="lastModifierName"><![CDATA[270784@ku.dk]]></property>
    <property name="lastModificationDate">2013-01-21 15:56:34.000</property>
    <property name="versionComment"><![CDATA[]]></property>
    <collection name="historicalVersions" class="java.util.Collection">
      <element class="Page" package="com.atlassian.confluence.pages">
        <id name="id">33919294</id>
      </element>
      <element class="Page" package="com.atlassian.confluence.pages">
        <id name="id">33920589</id>
      </element>
      <element class="Page" package="com.atlassian.confluence.pages">
        <id name="id">33920851</id>
      </element>
    </collection>
    <property name="contentStatus"><![CDATA[current]]></property>
  </object>
  [...]
</hibernate-generic>
```

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- ▶ Zip archive containing a 139 MiB XML as a single file and 851 attachment files.
- ▶ The XML looks like a generic dump of an OODBMS.
- ▶ Each of the top-level elements represent an object, which
 - ▶ has an ID
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67270	ReferralLink	82	ContentPermissionSet
28125	OutgoingLink	33	Labelling
11575	BodyContent	25	Label
11569	Page	5	TrackbackLink
2340	BucketPropertySetItem	4	Comment
851	Attachment	4	ConfluenceBandanaRecord
265	ContentPermission	2	PageTemplate
136	SpacePermission	2	SpaceDescription
		1	Space

Conversion?

- ▶ Seems feasible to extract sets of pages based on title and subpage structure.
- ▶ There are some utilities for supervised conversion, but they are probably not good enough for full automation.
- ▶ MediaWiki has a nice API which allows bots to query and edit.

Discussion

- ▶ What authorization groups do we need?
- ▶ How much of the existing wiki should we copy?
- ▶ Are there areas which need reorganization?
- ▶ Where and how can we put subpages to good use?
- ▶ In particular, how do we organize the meeting pages?