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RSS Matters

Link to the last RSS article here: New Developments with Web Based Surveys on the Web2Survey Zope Server - Ed.

Editing HTML with the Kupu Editor on the Web2Survey Zope Server

By **Dr Rich Herrington**, ACS Research and Statistical Support Services Consultant

Previously in the RSS column (April 2006) we have discussed using the open-source HTML WYSIWYG editor Nvu to edit HTML pages on the Web2Survey Zope server. The following RSS installment discussed content management systems (CMS), specifically Zope/Plone (May 2006). In the May 2006 RSS installment, the web development technique Ajax was briefly referred to (e.g. XMLHttpRequest). Ajax refers to programming practices that use asynchronous JavaScript. Ajax web development techniques are used my many websites (e.g. Google; Yahoo) to implement responsive and dynamic websites. Effectively, Ajax applications partly duplicate the functionality of Java applets: lightweight mini-applications that are processed inside the client's browser; however, the Ajax platform is more restricted. The practical upshot of this is that a client's session has greater interactivity, speed, and usability. Ajax uses the XMLHttpRequest API to exchange data asynchronously with the web server. Although the XML format is routinely used to exchange data between the server and the client, other formats work as well (e.g. HTML, plain text, etc.). Several web-based HTML editors (see list of editors) utilize JavaScript and the Ajax platform to implement "in-place" editing of HTML documents.

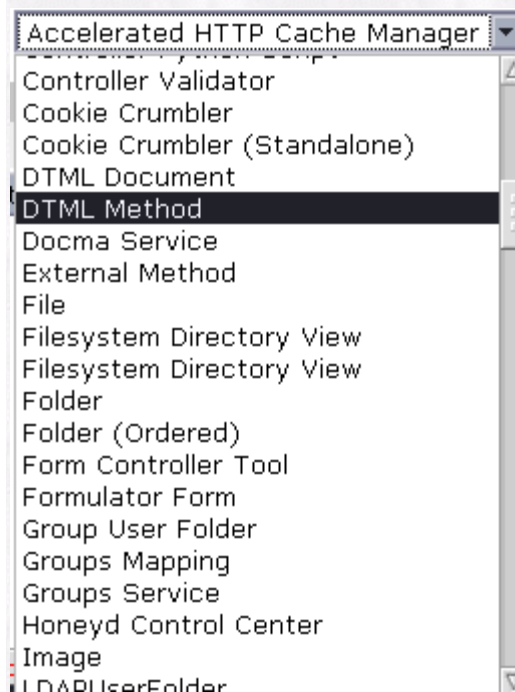### Kupu: A Web Based Editor That Uses Asynchronous Javascript

Kupu is a "document-centric" open source client-side editor for Mozilla (e.g. Firefox), Netscape and Internet Explorer. Kupu was primarily written by (among others) Paul Everitt, Guido Wesdorp and Philipp von Weitershausen. Kupu was inspired by Maik Jablonski's Epoz editor. Kupu has been integrated into a variety of CMS including: Zope, Silva, Plone and Apache Lenya. Kupu uses CSS rather than HTML for layout and presentation and also supports asynchronous saving to the web server.
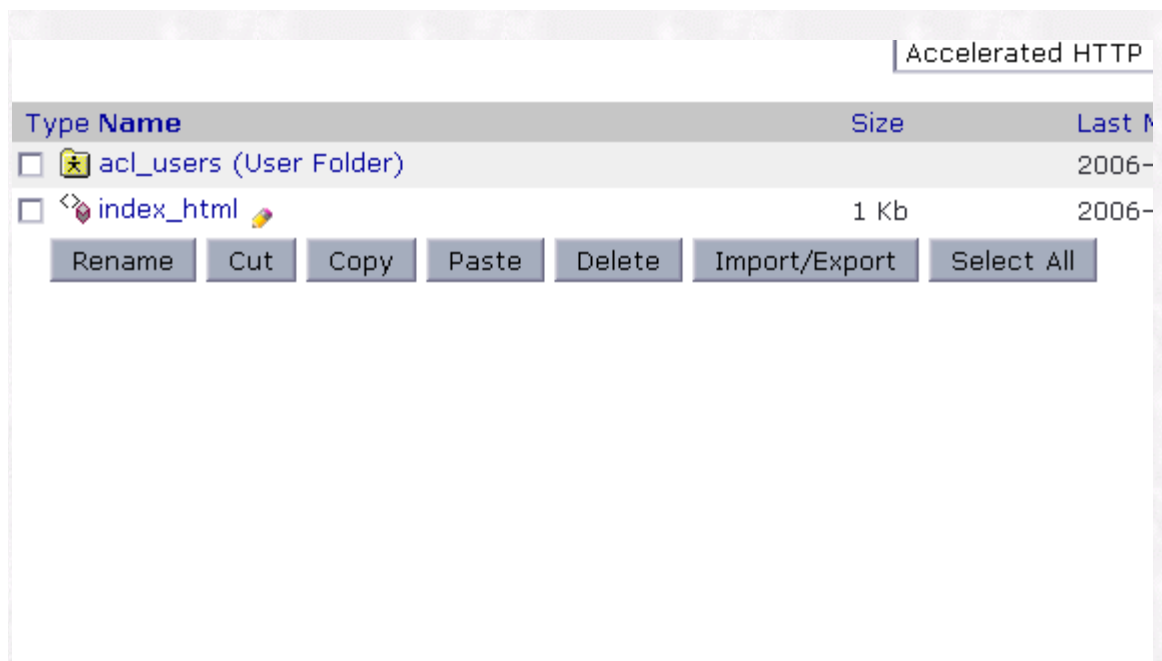
Setting up the Kupu Editor on Zope

I will start out with a new Zope account and proceed through the steps necessary to edit HTML documents with the Kupu editor. After logging into your Zope account, you should see something like the following (this is a newly created Zope account - for instructions on logging in see June 2005, tutorial 1):
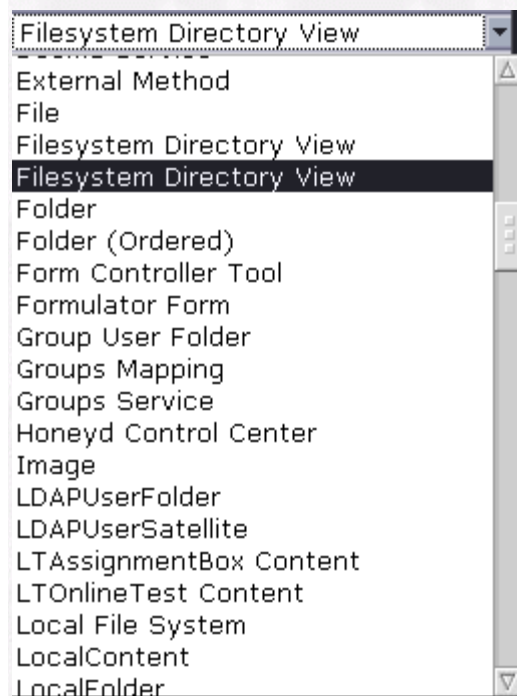

Notice that Zope uses index_html as the default HTML index page rather than index.html or index.htm. Delete your original **index_html** page and add a new DTML method document from the drop down menu (Make sure you use **Method** and NOT Document!!):

and name it **index_html**. You should see the following:

Accelerated HTTP

Type **Name**	Size	Last M
☐ 🗂 acl_users (User Folder)		2006–
☐ ◇ index_html 🖉	1 Kb	2006–

| Rename | Cut | Copy | Paste | Delete | Import/Export | Select All |

Next, add a **Filesystem Directory View** object (choose the second entry):

Filesystem Directory View

External Method
File
Filesystem Directory View
Filesystem Directory View
Folder
Folder (Ordered)
Form Controller Tool
Formulator Form
Group User Folder
Groups Mapping
Groups Service
Honeyd Control Center
Image
LDAPUserFolder
LDAPUserSatellite
LTAssignmentBox Content
LTOnlineTest Content
Local File System
LocalContent
LocalFolder

After the display of the browser window that has the entry fields for the **Filesystem Directory View**, scroll down and select **kupu/common**. Name the object **kupu**, for example:
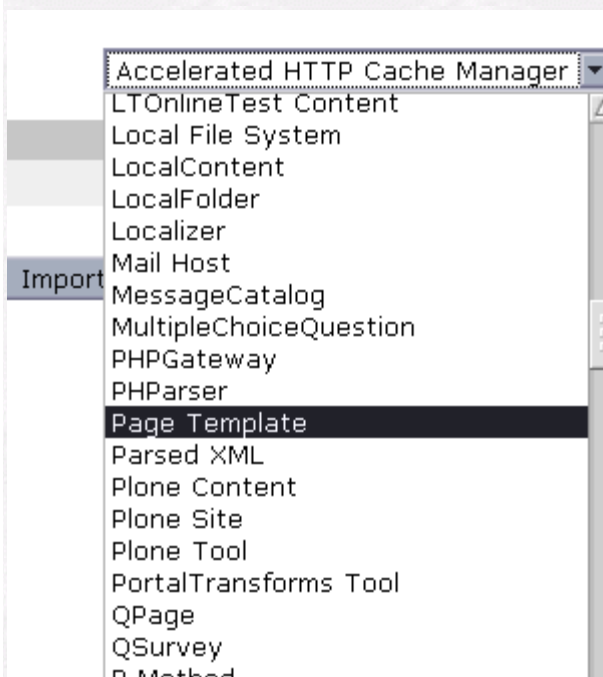
Add Directory View

Directory
```
kupu/common
kupu/common/kupudrawers
kupu/common/kupudrawers/logos
kupu/common/kupuimages
kupu/common/kupupopups
```

Id `kupu`

(Leave blank to use the default.)

[Add]

Next, we need to create a [Zope Page Template (ZPT)](#) named **kupu_edit** that makes the JavaScript libraries available to an editing session. Create a ZPT from the object drop-down menu and name it **kupu_edit**, for example:

```
Accelerated HTTP Cache Manager ▼
LTOnlineTest Content
Local File System
LocalContent
LocalFolder
Localizer
Mail Host
MessageCatalog
MultipleChoiceQuestion
PHPGateway
PHPParser
Page Template
Parsed XML
Plone Content
Plone Site
Plone Tool
PortalTransforms Tool
QPage
QSurvey
R Method
```

Import

After the changes have been committed, you should see:

Folder at /users/RichH

```
                                              Accelerat
Type Name                                     Size
□ 🖹 acl_users (User Folder)
□ ◇🔖 index_html ✏                             1 Kb
□ 📁 kupu
□ 🗋 kupu_edit ✏                               1 Kb
   [Rename]  [Cut]  [Copy]  [Paste]  [Delete]  [Import/Export]
```

Next, we need to change the default HTML content for the **kupu_edit** page template. At the [URL](#):

 https://web2survey.unt.edu/Utilities/kupu_edit.txt

we have the necessary HTML and Javascript to include in the newly created **kupu_edit** file. Note that YOU ONLY NEED TO CREATE THE **kupu_edit** ZPT FILE ONCE. It will act as an editing template that accesses the Javascript libraries for all edited documents (we discuss this later):

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml"
      xmlns:tal="http://xml.zope.org/namespaces/tal"
      xmlns:metal="http://xml.zope.org/namespaces/metal"
      xmlns:i18n="http://xml.zope.org/namespaces/i18n"
      tal:define="kupu here/kupu;
                  macros kupu/kupumacros/macros;
                  kupu_url  kupu/absolute_url;
                  document_url here/REQUEST/URL1">

 <!--
   Create a 'kupu editor' object in the folder where you want
   enable visual editing with kupu. Call it 'kupu' (you can ca
   something else, but this template relies on this name being
   'kupu'). Add a Page Template next to the kupu object and co
   contents of this file into it. Call the Page Template 'kupu
   or something like that. You can now point your browser at a
   URL, append '/kupu_edit' and you will be able to edit the o
   with kupu.

   Note: kupumacros require kupu_url and document_url be defin
   -->

 <head>
   <title>Kupu Editor example template</title>
```

The contents of this kupu_edit.txt file needs to be placed in the **kupu_edit** ZPT file. Edit the **kupu_edit** ZPT file in your root Zope directory by clicking the **kupu_edit** ZPT link. You should see:

Page Template at **/users/RichH/kupu_edit**

Title

Last Modified   2006-06-15 03:47 PM

```
<html>
  <head>
    <title tal:content="template/title">The title</title>
  </head>
  <body>

    <h2><span tal:replace="here/title_or_id">content title or id<
        <span tal:condition="template/title"
              tal:replace="template/title">optional template titl

    This is Page Template <em tal:content="template/id">template
  </body>
</html>
```

| Save Changes | | Taller | Shorter | Wider | Narrower |

This text needs to be replaced by the contents of the kupu_edit.txt file. Highlight all of this text and push the delete key on the keyboard (i.e. Ctrl-a keys and then press delete). Then select the text from the kupu_edit.txt file and paste it into the window above (i.e. Ctrl-a, Ctrl-c, then Ctrl-v). Click **Save Changes**. If your editing changes to **kupu_edit** have been successful, you should see the following (note: there should not be any of the original text from the default creation of the kupu_edit file in the ZPT page template, **kupu_edit**):

To invoke the kupu editor for any HTML object (or in this case a DTML object - the default Zope index page), follow the HTML object name with the text **/kupu_edit** For example, using the full URL for the HTML object that you wish to edit, we type the following in the browser URL entry field (notice the /kupu_edit after the index_html object name):
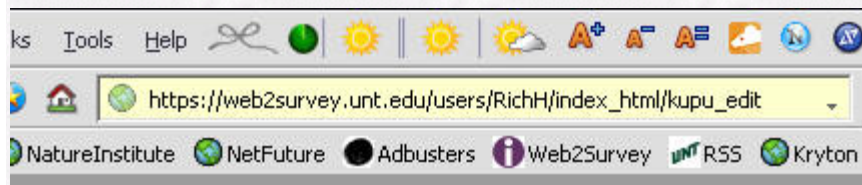

You should see something like the following after the kupu editor has started:
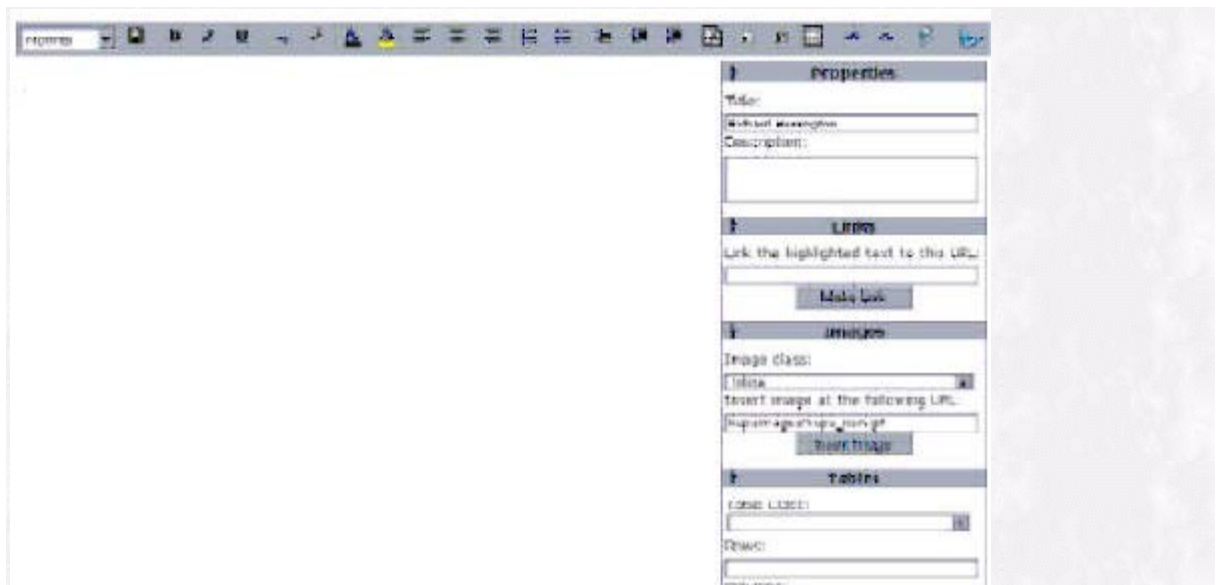
To edit the contents in either the HTML source or WYSIWYG editing mode, click the edit button (once for HTML source mode; click again to enter into the WYSIWYG editing mode):

You should see the text region is now active for editing or text entry (note the thin bar in front of the "R" of Richard):

Richard Herrington

This is the index_html Document in the Richard Herrington (RichH) Folder.
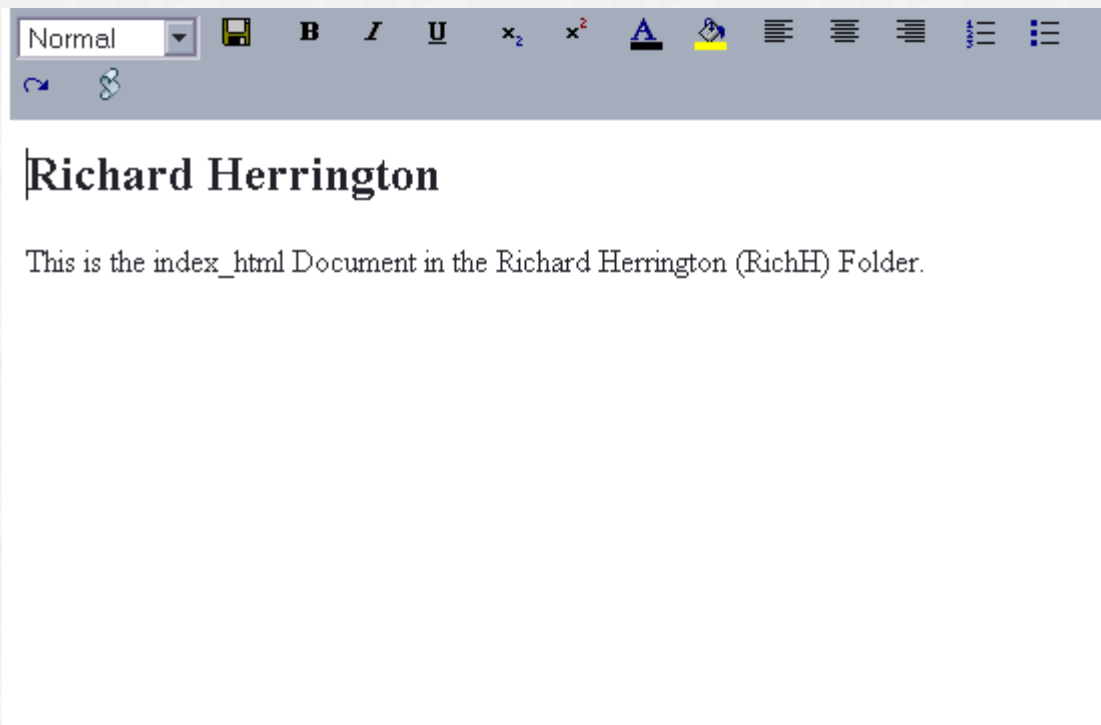
Clicking the save button will allow changes to be saved to the web server for the currently edited HTML file **(note: you will be prompted for username-password login IF the directory that contains the HTML is password restricted)**. After making changes, and saving, you should see the following:
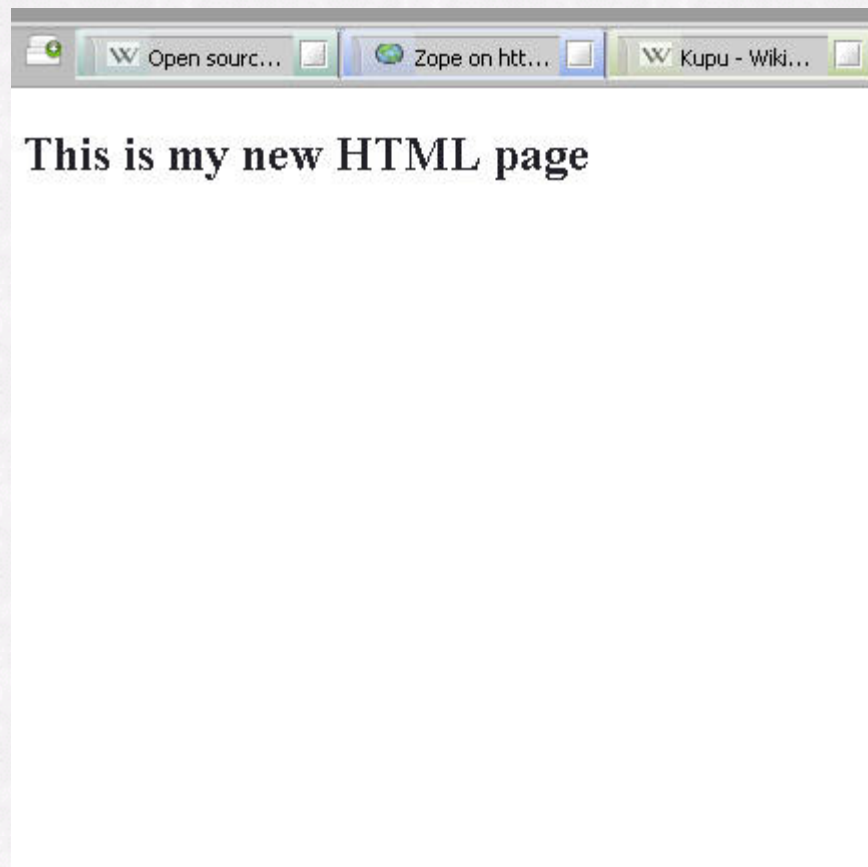
This is my new HTML page
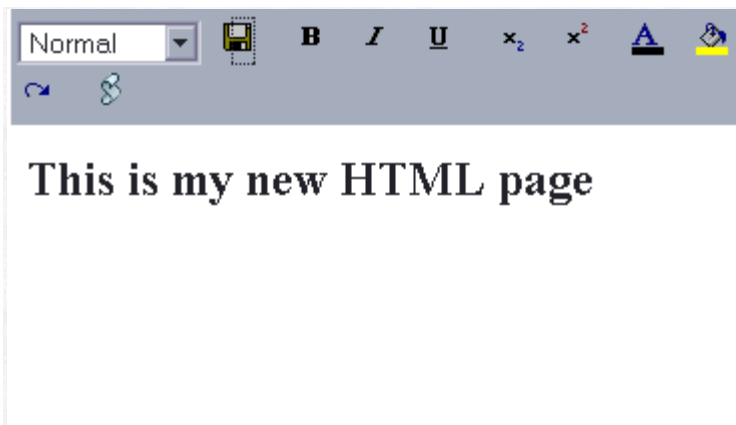
Browsing the URL (entering into the browser URL entry field and clicking "GO"):

https://web2survey.unt.edu/users/RichH/index_html
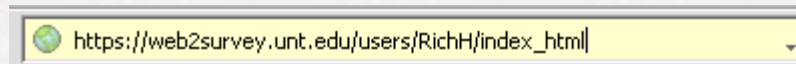
Displays the Zope **index_html** webpage in the browser window:

This is my new HTML page

Remember, that once you have created the initial **kupu** editor folder, and have created the ZPT **kupu_edit** template, you don't have to create these again. Editing any HTML object or Zope DTML object is done by following the object's URL with **/kupu_edit** This invokes the kupu editor instance on that object. Additionally, remember that since kupu uses Javascript libraries, you must have Javascript enabled in your browser. Once last suggestion: the URL and object used in this current demonstration are still published. If you wish to experiment with the kupu editor, you can access it by going to the URL:

 https://web2survey.unt.edu/users/RichH/index_html/kupu_edit

You WON'T be able to save any changes to the web server since the directory is password protected, but at least you can get an idea of how the kupu editor looks and feels "real time". Good luck!

Related Websites

[Kupu Editor](#)
[Kupu Documentation](#)
[Lenya Kupu Documentation](#)
[O'Reilly Article: Rich Web Text Editing with Kupu](#)
[Kupu Zope Project](#)
[Review of WYSIWYG Editors](#)
[Using WYSIWYG Editors with Zope](#)
[Zope Labs](#)

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