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WikiWorks4SSP for VisualWorks 7.7

Date: 30. July 2009

Contents

1. What is WikiWorks4SSP?

WikiWorks4SSP is the connection between VisualWave WebToolkit and WikiWorks Wiki software. Wikis appear as websites that are readable/writable for anyone. They are very popular as you can see counting the hits in a search engine. The user may up/download files, edit the pages etc.
Wikis have their own syntax but you can also use any html-tags you want.

WebToolkit is a server-software that is connected to the Smalltalk environment. It is able to listen on a specified port, redirecting requests to the Smalltalk environment where the data is processed. This way it is possible to make a server compile and execute Smalltalk code that is stored in web page files called ”Smalltalk Server Pages” (SSP).
WikiWorks4SSP combines the advantages of the two worlds with each other, having the following features

- authorization based accesslevels
- up/download
- rename pages
- view differences between different versions
- view the changing history of a page
- revert to an older version of a page
- CSS Style Sheets for each Wiki
- two storage formats (flat file and ISAM file)

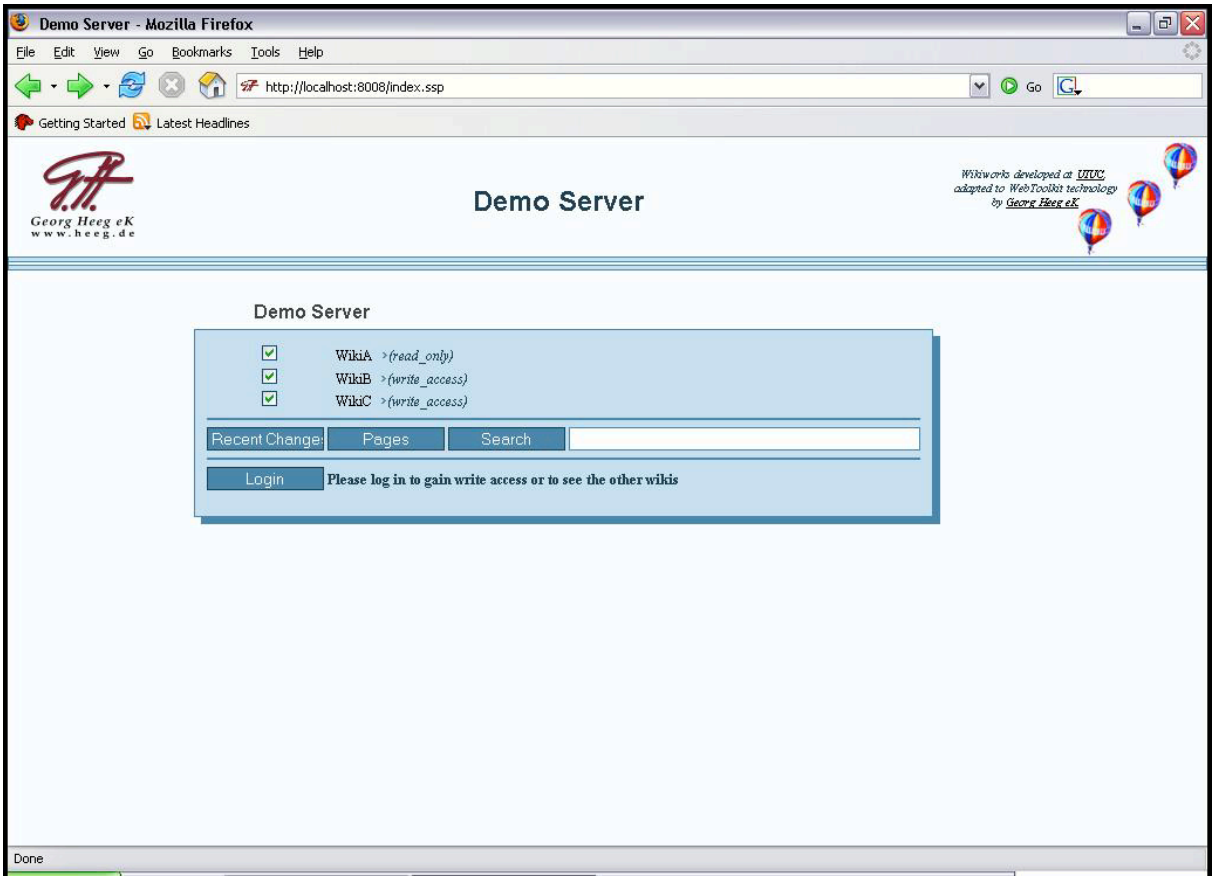

Figure 1: a wiki start screen

2. Installation

To get a Wiki running you need to install the WikiWorks4SSP parcel. At first, install VisualWorks as usual. Open the ParcelManager and load the WikiWorks4SSP parcel. You will now have WikiWorks4SSP in your image and a couple of files in the current directory. To start up the wiki use the Web Server Console from the VisualLauncher toolbar. Now type http://localhost:8008/ in your browser to test whether the whole system is working. You should now see something like the content of the screenshot above (Figure 1).

3. Configuration

All the configuration is done in the file wiki.ini. If you modify it you can reconfigure the running server by executing 'Wiki returnFromSnapshot'. In this section we will describe the basic structure of the wiki.ini, with its options and their possible values.

3.1 Sections

wiki.ini is partitioned into several sections. The beginning of a new section is indicated by the title of the section in square brackets.
[<section title>]

where <section title> can be one of
- server (to configure options for the server)
- wiki (to configure option for each wiki)

3.2 Options

Options are expressed using the <option> = <value> scheme.

3.2.1 Server Options

Possible options and their values for the [server] section are listed in table 1. At least you should specify portnumber and servertype. If there isn't a server created using the Web Server Console from the VisualLauncher, one will be created with the informations from the wiki.ini.

Option	Type	Default Value	Description
name	String		name of the Server
serverType	String	WaveHTTPRequestBroker	class name of the type of server
port	Integer	8008	TCP port to use
read user	String		user with read permission
read user password	String		password for the read user
write user	String		user with write permission
write user password	String		password for the write user
css	URL		URL to your Stylesheets

Table 1: server attributes

3.2.2 Wiki Options

To specify a wiki, add a [wiki] section to wiki.ini. Possible options and their values for this section are listed in tables 2.

Option	Type	Default Value	Description
name	String		name of the Wiki
directory	String		Directory of the Wiki
fileserver	Boolean		toggle upload and download function
write user	String		see table 1
write user password	String		see table 1
read user	String		see table 1
read user password	String		see table 1
readableForPublic	Boolean		toggle visible/invisible
storageType	String	flatFile	set the storage format of this wiki, see explanation in the chapter 5. valid values are : flatFile or isamFile

Table 2: wiki attributes

3.3 Example Configuration

```
[Server]
name=Demo Server
#serverType=WaveIPRequestBroker
#port=8008
css=css/style.css

[Wiki]
name=WikiA
directory=wiki/wikiA
fileserver=false
write_user=xx
write_user_password=xx
readableForPublic=true
css=css/style-V1.css

[Wiki]
name=WikiB
directory=wiki/wikiB
fileserver=true
readableForPublic=true
css=css/style-V2.css

[Wiki]
name=WikiC
directory=wiki/wikiC
fileserver=true
readableForPublic=false
```

4. Wiki function

4.1 Edit function

Use the Edit function to create or edit wikipages. You may enter any HTML-Tag you want or use WikiSyntax as it is described in the WikiSyntax link. To abort editing press the abort button. Note that any changes will be ignored. Press the Preview button to make you changes visible. This is only a Preview, the changes are not saved! To Save your changes press the Save button. This will create a new instance of a WikiPage.

4.2 Rename

Type the new title into the input field and press the Save button to make your changes take e ect.
If the new name is already assigned to a page in the wiki the changes will be ignored and yo will be forced to enter a new name. Pressing the Abort button will cancel renaming and abolish changes.

4.3 History

In the History section you can see detailed information about the changes you have made on single wiki pages. In the version column you see links to the versions of a page, klick them to have them rendered and shown the changes relative to the prior version.
The IPAddress of the client that changed the page is noted under author. The last column contains informations about when the changes were made.

4.4 Upload

If you have the fileserver attribute enabled this option will be available to you. Use the <Browse...> button to choose a file to upload. Enter a valid subdirectory into the input feld below. This subdirectory is a subdirectory of the Wiki/Attachment directory and will be created if not existing.
Do not try combinations starting with ”../” as this will end up in errors. To complete the upload press the <Upload Now!>-button . The download will start and you will be informed about the success or fail of the download.

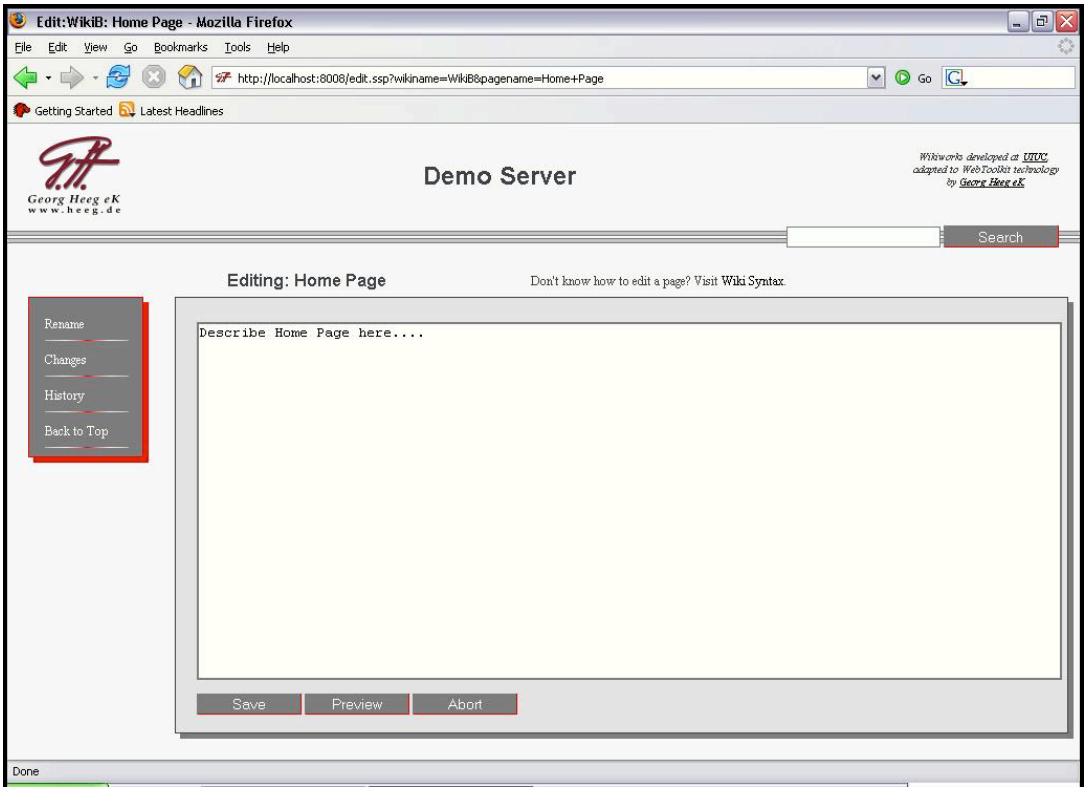

Figure 2: Edit screenshot

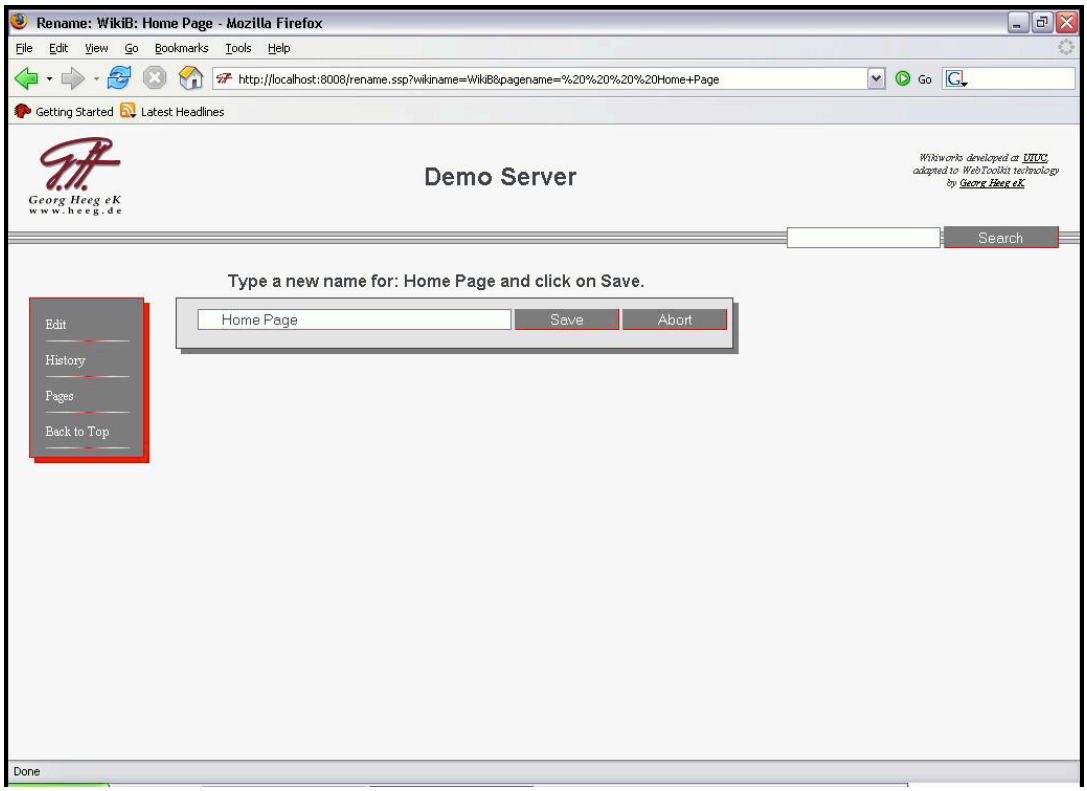

Figure 3: Rename screenshot

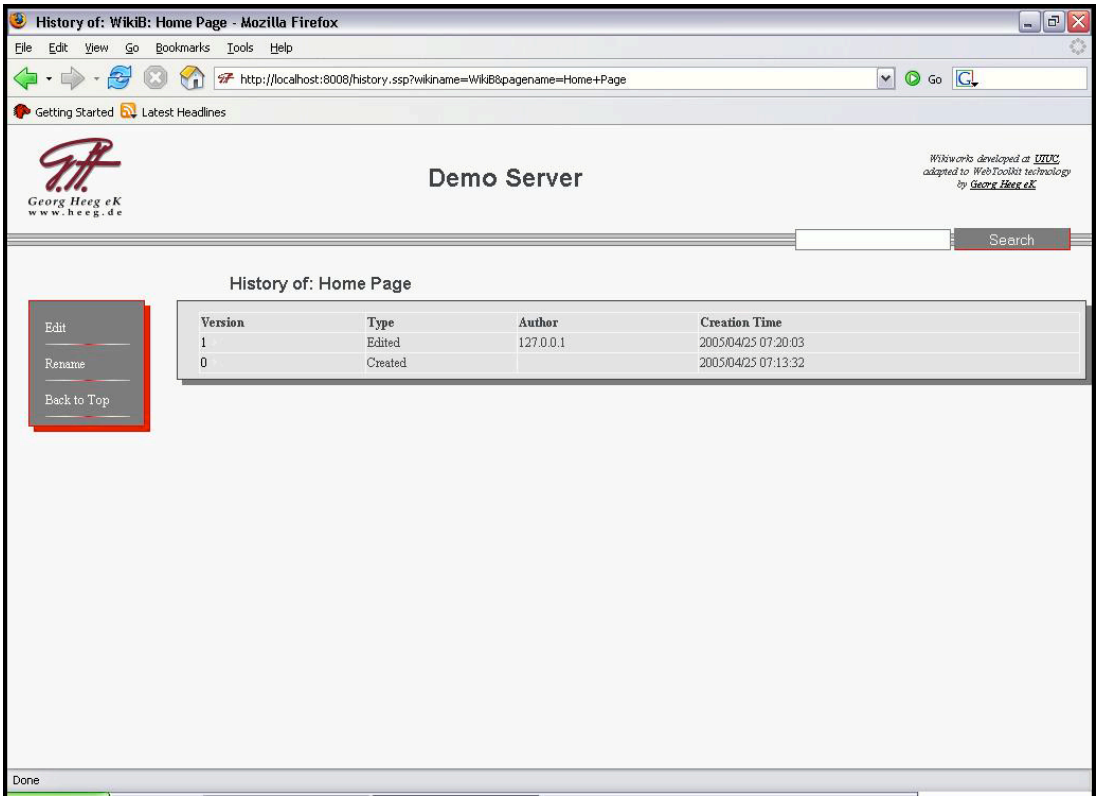

Figure 4: History screenshot

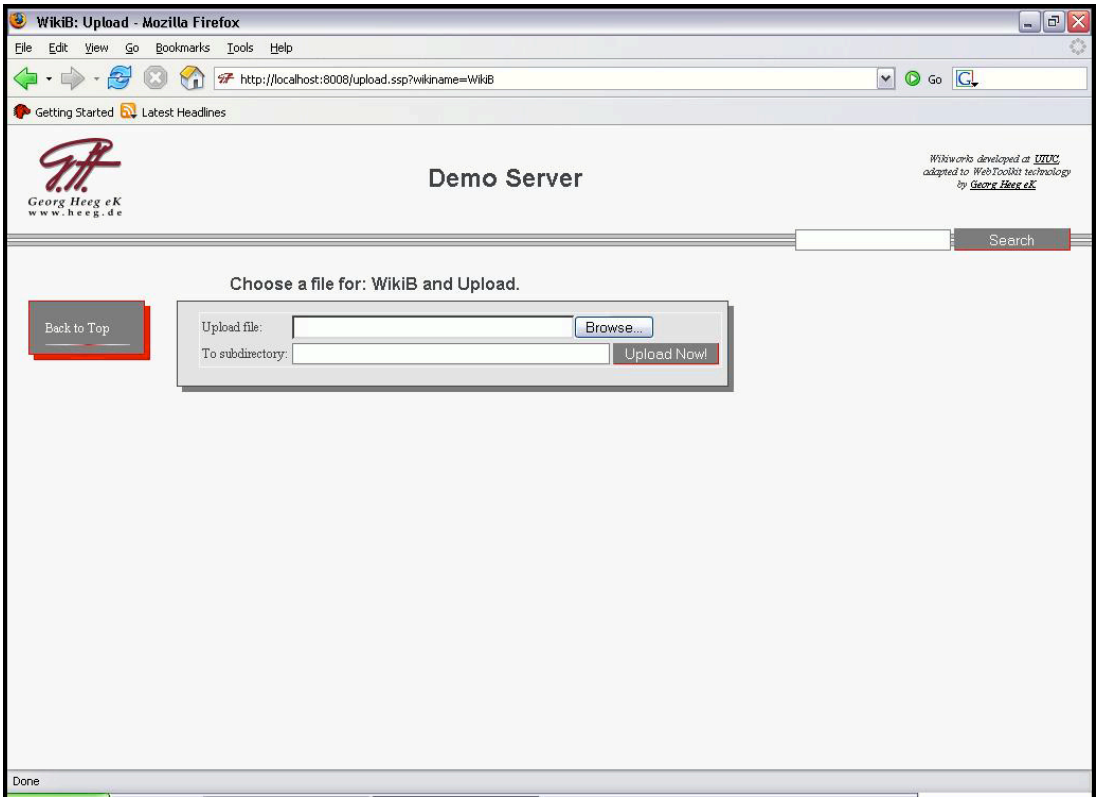

Figure 5: Upload screenshot

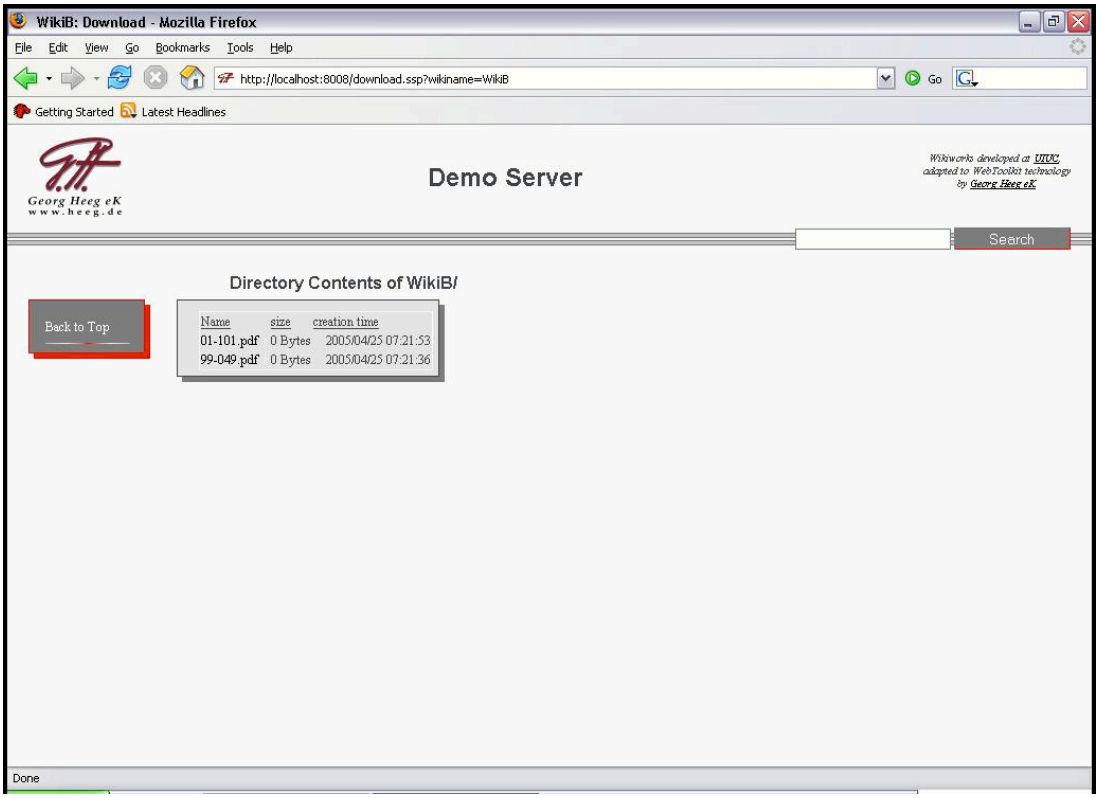

Figure 6: Download screenshot

4.5 Download

This function may be deactivated with the fileserver function, too. You will see a list of all files in the wiki attachment directory with detailed informations like their timestamp or their size and directories. Clicking on a directories link will change to that directory, as you will see in the changes of the title. Clicking on a file link will start a download request.

4.6 Pages

This option lists all the current pages kept by the wiki. (see Figure 7)

5. Further Comments

5.1 Old Syntax, new Syntax

For users used to the old wiki url calling scheme (<hostname>/<wikiname>/<pagename>) there has been a compatibility feature added. Therefore WikiRedirectionAnswers translate old style wiki urls to new style. There is no need to configure them as they are preconfigured for you.

5.2 fileserver Attribute

If there has been a fileserver attribute set in the configuration file there will be a FileResponder4ssp added for each wiki. Those responders cannot be configured, and the download directory is always the ATTACHMENT directory of the individual wiki.

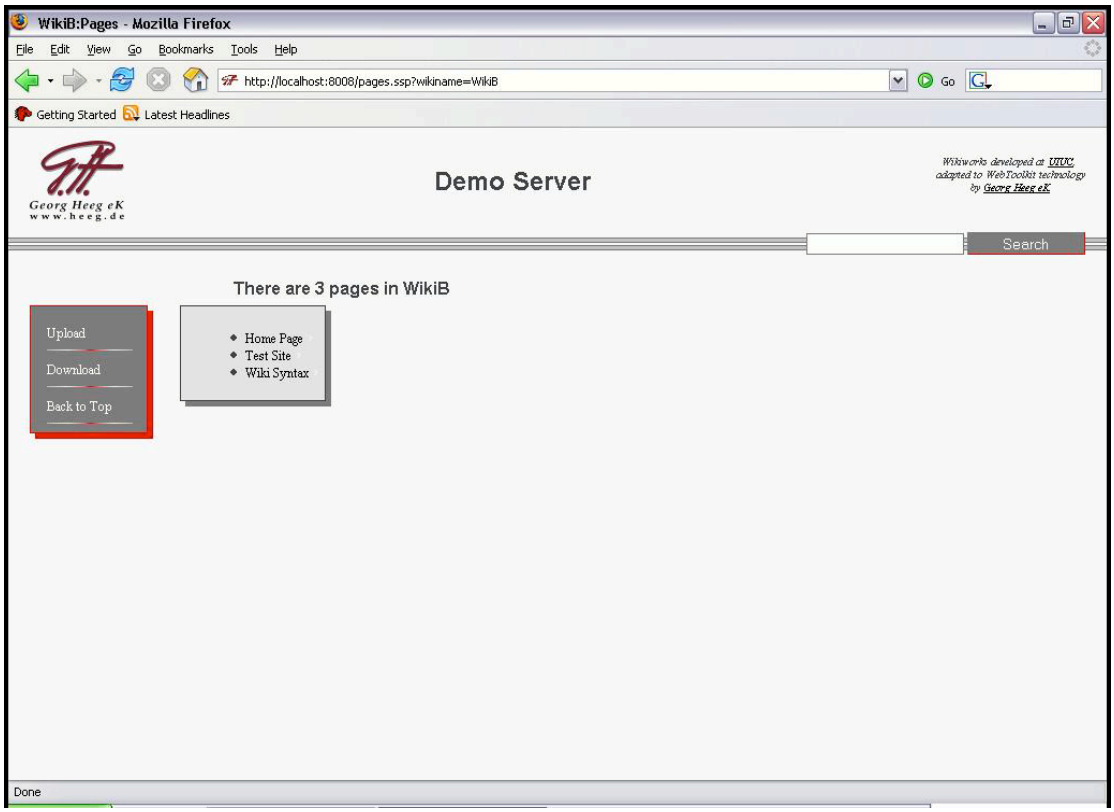

Figure 7: Pages screenshot

5.3 Storage Format of a Wiki

Wikis may be configured to have a specific storage format. The supported formats differ in the way the page information of each wiki page is stored into the file system. When using the flat file format, each page version is a separate file. While this is simple and straightforward, the number of files can get very high the older the wiki gets, because each page edit will create a new file. The isam file based storage format will store all page information into a single database file. While this is easier to backup, restore and transfer, it also ensures a better consistency of the wiki. One lost file in a flat file wiki leads to an inconsistent wiki, where links between pages or the history of a page are lost. It is teadious to reconstruct such a broken wiki.
The idea is that the storageType of a wiki never changes during its lifetime. However, as a Smalltalk programmer you are able to convert a flatFile-Wiki into an ISAM-Wiki by executing a statement similar to the following ('WikiA' is assumed to be a flat file wiki):

```
oldWiki := CompositeWiki current componentNamed: 'WikiA'.
newWiki := self convertInstallFlatFileWiki: oldWiki.
```

Please remember to change the configuration of 'WikiA' in the wiki.ini-File accordingly (add a line: storageType=isamFile) to ensure a correct start-up.
After the conversion you can delete all the *.pag-files in the converted wiki subdirectory (for above example the directory would be: wiki\WikiA).