CamTools RWiki How-To Guide

How to do just about anything in the Wiki tool!

Version 2.2

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I. Introduction

What is a Wiki?

A Wiki is a tool for people with no technical knowledge to change and create web pages. The website is within CamTools and is password protected, so you can store sensitive data securely. RWiki was designed specifically for researchers and lecturers to collaborate on documents, share information and create teaching materials with other members of their group.

Why might you use it?

Research groups might use a Wiki for drafting abstracts and proposals, annotating documents, or sharing thoughts.

Teachers might use a Wiki for putting course materials online, or to have their students collaborate on producing writing which can then be shared with others.

Administrative groups might use a Wiki for drafting documents and keeping task lists.

Some people also have private Wikis where they make their own notes online.

Some technical details

RWiki is an open-source Wiki tool developed as part of the Sakai Project. It uses the Radeox engine and hence has the same markup as mainstream wiki tool like SnipSnap. It has been implemented in such a way as to allow Radeox based wiki macros to be used. (eg Radeox RSS Aggregator). RWiki is designed and developed at the Centre for Applied Research into Educational Technology (CARET) at Cambridge University.
II. How to use RWiki

Some notes about using CamTools on a Mac

If you are using Internet Explorer on a Mac, you may find some difficulties editing your Wiki pages. They won't be laid out neatly on the page. You'll also see some other problems around CamTools more generally.

This is because IE for Macs is comparatively old: Microsoft have now stopped offering IE for Macs, and have also stopped supporting it with security upgrades. We, Apple and Microsoft all recommend that you stop using IE and move onto a more up-to-date browser such as Firefox or Safari. Safari comes from Apple itself, and is an excellent browser with many good features. However, unfortunately CamTools doesn't fully support Safari-users (see the CamTools Quick Guide for more details). Firefox is a very good, free browser, downloadable from www.mozilla.com. CamTools is heavily tested on Firefox on Macs and shouldn't have any problems like those you see with IE.

Getting started

If your course or workgroup uses RWiki, you will see it displayed in the list of course options within CamTools. Selecting ‘Wiki’ will take you to the RWiki home page for that worksite.

If you are an administrator and wish to add RWiki to your worksite, use Site Info to select it in your list of tools. (See the Quick Guide to CamTools or the online User Guide for full information on how to do this)

Some people like to have a private Wiki (that only they can see) in their My Workspace so that they can make private notes, plan their tasklists etc. To do this

1. Go to My Workspace
2. Click 'Worksite Setup'. You will see a list of the worksites you're a member of.
3. Put a tick in the box next to 'My Workspace', to say this is the one you want to edit.
4. Click the 'revise' button at the top of the page. You will see an overview of the info about your Workspace
5. Click 'edit tools'. You will see a list of the tools currently in 'My Workspace'.
6. Put a tick in the box next to Wiki
7. Press 'continue'
8. Press 'finish'.

You should now have a Wiki in your Workspace.
Viewing pages

To move from page to page in RWiki, follow the links within each page. Links with an arrow icon beside them link to external websites or to attached files. These will open in a new window.

As you navigate around RWiki, your breadcrumb trail will appear at the top of the page. (A breadcrumb trail lists the pages that you have visited in order.) You can use this to return to any page at any time.

Unlike some wiki tools, RWiki does not have a separate menu to navigate through the pages. All navigation must be done through links on the pages.

At the bottom of the page, you will see the name of the person who last edited that page and the date of the most recent changes.

Searching for content

To search for content, type your search term in the search box and press ‘return’. All pages on that wiki site containing your search terms will be listed. Don’t forget that pages which are not in the wiki will not be searched. If you want to search the whole of your CamTools site, you need to have the CamTools Search tool switched on in your site.

This search will be recorded in your breadcrumb trail and you can return to your results page at any time.

Editing your pages – first steps

To edit the contents of a page, select the ‘Edit’ button at the top of the page. You will see your page appear in an editable version in a text box.

Make your changes in the text box.

Then select the ‘Save’ button at the bottom of the page. Your changes will appear in the wiki page for the other members of your worksite to see.

That’s how easy it is to change things in a wiki!

If you want to preview your changes before you save them, you can press the ‘Preview’ button. Your new page will be displayed at the bottom of the page, under the editable text box.

If you want to cancel without making any changes, press the ‘Cancel’ button.

If you receive a message “Permission Denied” when you try to edit a page, you do not have permission to update pages. If you think this is a mistake, you will need to talk to your site administrator to change this.
**Linking to another wiki page**

To add a link to another RWiki page, type the name of that page within square brackets. For example, typing ‘[page 2]’ will link to the page called ‘page 2’. You can tell what the name of a page is as the name is displayed at the top of each page.

If you accidentally delete something that you didn’t want to, this is not a problem. See below for how to revert to an earlier version of a page.

**Creating a new wiki page**

To create a new page, create a link to it from an existing page. For example, if you do not already have a page called ‘page 2’, typing ‘[page 2]’ will create a new, empty page called ‘page 2’. When you first create a page, and have not yet added any text to it, its name will display with a ‘?’ after it, like this: ‘page2?’. This is to remind you that you need to add text to that page.

However, you can’t use the following characters in an RWiki link or title. This is because the RWiki tool needs them for other things!

- : Colon
- @ At
- # Hash
- | Pipe
- \ Back-Slash

**Linking to external web pages**

To add a link to an external web page, type the full URL including ‘http://’. For example, ‘http://www.bbc.co.uk’.

**What happens if someone else is changing the page at the same time?**

If someone else has edited and saved the page while you have been editing it, you will see a message to say that the page has altered, and their new page will be displayed above yours. You can then decide to replace their changes with yours (using the ‘overwrite’ button) or to keep their changes (using the ‘save’ button).

**Editing content – making it look how you want it to**

The point of a wiki tool is that it is easy for everyone to edit, so that it keeps up-to-date without the need of a specialist web master. Because of this, we don’t recommend that you go too crazy with altering the layout of the pages. You may be able to alter your fancy page, but there’s no guarantee that your colleagues will be able to!
However, there are lots of simple things that you can do to style your wiki pages correctly.

When you edit the page, you will see a ‘cheat sheet’ displayed on the page to the right. This gives you a brief introduction to the codes used for text formatting in RWiki. The ‘cheat sheet’ links to a full help page. Use this help page to get full information on text formatting, including superscripts, different sorts of lists, etc.

Here are some of the most useful basic formatting rules.

**Headings**

To display text as a large heading, type ‘h1 ’ (with a space after the 1) at the beginning of the line. For example

```
h1 Harriet’s New Page
```

will display as

**HARRIET’S NEW PAGE**

To display text as a small heading, type ‘h3 ’ (with a space after the 3) at the beginning of the line. For example

```
h3 Harriet’s New Page
```

will display as

**HARRIET’S NEW PAGE**

**Bold text**

To display text in bold, put ‘__’ on either side of the text. For example

```
__bold__
```

will display as

**bold**

**Italic text**

To display text in italics, put ‘~~’ on either side of the text. For example

```
~~italic~~
```

will display as

*italic*
Unnumbered lists

To display unnumbered lists, put a ‘* ’ or a ‘- ‘ at the beginning of each line. For example

* dog
* cat
* squirrel

will display as

• dog
• cat
• squirrel

Enumerated lists

These are slightly counter-intuitive because the wiki will count the numbers for you.

a. dog
a. cat
a. bears!

will display as

a. dog
b. cat
c. bears!

i. dog
i. cat
i. bears

will display as

i. dog
ii. cat
iii. bears

Adding images

Before you add an image, make sure that it is the correct size and shape for your web page, and that the file size is optimised for the web. If you put an image with a very large file size into a wiki page, it will take a long time for users to download it. Many painting programmes will allow you to compress images for the web. If you have taken a photo with a digital camera and want to put it in your wiki, one easy way to have it
resized and compressed is to upload it into www.flickr.com which will create a web-friendly version for you. See the Flickr website for full information on how to do this.

Select the ‘edit’ button to edit the page. Then select the ‘embed resource’ button. This will take you to your Resources folder.

You can either click ‘select’ to select an image that you have already included in your worksite, or click ‘add new’ to upload a new image from your computer. When you have chosen your image, click ‘finish’. The wiki code to attach your image will be inserted into your page. You can see how it will look by clicking the ‘Preview’ button.

If you update the image in Resources, your image in RWiki will automatically be updated too.

If you would like your image to appear on the right of the page, add the text “|right” to the end of the description, so that

{image:worksite://id.bmp|id.bmp}

becomes

{image:worksite://id.bmp|id.bmp|right}

However, this may not work! It will only work if the University’s stylesheet has been designed to allow wiki images to appear on the right – if they haven’t allowed this, it can’t happen, whatever you type in the wiki.

Adding attachments

Select the ‘edit’ button to edit the page. Then select the ‘resource link’ button. This will take you to your Resources folder. You can either click ‘select’ to attach an existing file on your worksite or click ‘add new’ to attach a new file from your computer. When you have chosen your file, click ‘finish’. Your image will be inserted into your page.

Attachments are stored in Resources – but you don’t need to have the Resources tool switched on in your CamTools worksite to add attachments. You can link to any sort of resource that you create in Resources – so, this could be any type of file you upload, or an HTML file or text file you create.

If you update the file in Resources, your attachment will automatically be updated too.

Maths notation

You can use TEX maths notation in the RWiki. See the appendix at the end of this document.

Adding comments to a RWiki page
Some people like to allow worksite members to attach comments to their Wiki pages. These appear separately at the end of the page. If you would like to do this, comments can be switched on for a site. To have comments switched on, please contact camtools@caret.cam.ac.uk.
III More information about your RWiki pages

To get more details about any page, select the ‘info’ option from the menu.

Printer-friendly, HTML and RSS versions of your pages

The information page includes a printer friendly version of the page, and a HTML version (a public web version). The HTML version is very useful if you want to make a page available to the general public. You can tell people the URL (web address) for this HTML version, and make it available for them to see (see ‘Page Permissions’ below).

An RSS feed is also available, which tells you only the most recent changes to your site. This can be useful if you are watching a particular site to see how it has been updated. The BBC gives the following information about RSS:

“RSS feeds are just a special kind of web page, designed to be read by computers rather than people. It might help to think of them as the free, internet version of the old-fashioned ticker-tape news wire machines.

In general, the first thing you need is something called a news reader. This is a piece of software that checks RSS feeds and lets you read any new articles that have been added to them. There are many different versions, some of which are accessed using a browser, and some of which are downloadable applications. Browser-based news readers let you catch up with your RSS feed subscriptions from any computer, whereas downloadable applications let you store them on your main computer …

[Y]ou can subscribe to the feed in various ways, including by dragging the URL of the RSS feed into your news reader or by cutting and pasting the same URL into a new feed in your news reader.”

To set up a news reader, see the full information here:
http://news.bbc.co.uk/1/hi/help/3223484.stm

Page Details

The info page also gives you the following details about a page. They are described more fully if you click on the ‘?’ next to each title.

1. Incoming: lists all pages the page links to
2. Outgoing: lists all pages that link to this page
3. Page owner: usually the person who created this page
4. Global page name: use this if you want to link direct to this page from another Wiki inside CamTools
5. Permission section: Gives the site you need to be a member of to see this page
6. Gives details of when the page was last edited

Full history of your pages
To get the history of any page, select the ‘history’ option from the menu.

This shows you a list of all previous versions of that page, with the name of the user who altered it, the date, and what the permissions were at that time (i.e. who could read the page and who could alter it).

Most changes that people make are to the contents of the page, but sometimes people edit the permissions on a page. If this is the case, it will be shown in the ‘changed’ column of the list of versions. Click on the ‘?’ by the permissions column to see how to read the changes made to the permissions.

To view an earlier version, click on its version number, i.e. ‘V. 7’

If you made a mistake and want to go back to an earlier version of your wiki page, click on ‘revert to this version’. This won’t delete any intermediate versions of your wiki page. You can always go back to any version of a wiki page, so you can go ‘back’ to version 7 and then change your mind and go ‘forward’ to version 10.

You can compare the contents of any version with either the version immediately previous to that one, by clicking ‘to previous’, or to the current version, by clicking ‘to current’. This will show you the earlier version on the left of the page and the later version on the right of the page. Changes will be indicated by different coloured highlighting: see the key at the end of page.
IV. Controlling access to your wiki

Permissions allow you to control who can view or edit your wiki pages. For example, you might want to have lecturers edit pages, and students only able to read pages but not change them. Or you might want to have an entire research group able to change the wiki pages. You might eventually want to make your wiki permissions more sophisticated, and have different permissions on different pages. For example, you might decide that students can edit all the pages on the wiki except for the lecturers’ biographies!

(Support for CamTools groups in RWiki will be coming in a later version)

Simple control of your wiki: site permissions

You can use Site Permissions to control what happens to the whole of your wiki site. To access Site Permissions, click ‘info’ on any page, and then click ‘edit site permissions’.

<table>
<thead>
<tr>
<th>Role Permissions</th>
<th>Create</th>
<th>Read</th>
<th>Update</th>
<th>Admin</th>
<th>Super Admin</th>
</tr>
</thead>
<tbody>
<tr>
<td>access</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maintain</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

You will see a table with a list of the roles on the left and the different things that they can do in RWiki on the top.

What are roles?

Roles are a way of deciding who can do what to a site by assigning them to certain pre-defined groups. For example, in a traditional course, Dr Johnstone has the role ‘lecturer’, and Vicky Warshawski has the role of ‘student’. The Faculty administrator knows that lecturers can see exam papers before the exam takes place, but students can’t. This means that if Dr Johnstone asks to see the exam papers, he is shown them, but if Vicky asks to see the exam papers, she will be told to wait until the exam!

In CamTools project sites, there are two standard different types of role: ‘access’ and ‘maintain’. ‘Maintain’ users are those that are responsible for looking after a CamTools site, and ‘access’ users are those who can read what is in a CamTools site, and who can make contributions to the site where appropriate, but who can’t change the way it’s run. Usually, lecturers are ‘maintain’ users and students are ‘access’ users. In a research project, you might decide to have all the researchers as ‘maintain’ users, or you might decide that one or two people are ‘maintain’ users and everyone else is an ‘access’ user.

In CamTools course sites, there are three different types of role: ‘instructor’, ‘teaching assistants’ and ‘students’. These are pretty self-explanatory! A lot of teaching courses are actually set up as project sites as this is technically simpler for CARET. It doesn’t make any difference except for the different names of the roles.
There are five different things that people can do in RWiki: create new pages, read existing pages, update existing pages, administration of the site (e.g. changing this permissions list), and super-admin of the site (i.e. doing absolutely anything to the site).

To see what each role can do, read along the row and see which boxes are ticked. In this illustration, access users can create, read, and update pages. Maintain users can create, read and update pages, and administer the wiki site.

**How do you change RWiki permissions?**

To change permissions for your RWiki site, just click the appropriate box to tick or untick it.

For example, in the illustration below, at the moment, access users can create new pages and update existing pages, as well as reading pages. If you want to stop them updating pages and creating new pages, you need to click in the boxes beneath ‘create’ and ‘update’ in the ‘access’ row. These are shown circled in red.

It’s a good idea to make sure that only ‘maintain’ users have ‘admin’ rights: if you give everyone ‘admin’ rights, mischievous or inexperienced users might lock everyone out of the site!

If anything goes wrong with your permissions, contact camtools@caret.cam.ac.uk for help.

**Making it more sophisticated: page permissions**

You can change permissions for the whole of your RWiki site, but you can also use page permissions to change what people can see and do on individual pages.

To change page permissions, click the ‘info’ button on the appropriate page.
You change page permissions in a slightly different way to the way that you change site permissions. This is to make sure that what you say you want people to do is logical! For example, it wouldn’t be logical to say that people can update a page if they can’t read it in the first place.

Page permissions cascade downwards: that is, if you can administer a page, you can automatically also read it and update it (again, it wouldn’t make sense for you to be able to administer a page without knowing what was in it). If you can update a page, you can automatically read it. If you can read a page, this doesn’t necessarily mean that you can update or administer it, though.

Changing page permissions takes a bit of time to get the hang of. The following illustrations show you some popular scenarios.

**Having one page which can’t be edited by students**

To have one page on your wiki that can’t be changed by students, when all the others pages can be changed, un-tick the box below ‘update’ so that it looks like the illustration below.

![Page Permissions by role](image)

**Making RWiki pages publicly viewable**

To make an RWiki page readable or updateable by the public (that is, people who aren’t logged in to your CamTools site), tick the box in the appropriate column in the table, in the row labelled ‘public’. In the illustration below the ‘public’ – ‘read’ button has been ticked, making that page publicly viewable.
VI. Appendix: Wiki Maths Help

Using the math macro (and jsMath), it is possible to embed T E X marked-up mathematics in this wiki. This page has been written to provide examples of the macro’s use, and to provide some basic hints about the library we are using to present this.

- **Simple Inline Equations**: For \( y = 2x + 1 \) type
  \{\text{math}y=2x+1\text{math}\}

- **Simple Displayed Equations**: For many equations we’d like them to be displayed on a line by themselves:

  \[ y = 2x + 1 \]

  To do this we type \{\text{math:display}y=2x+1\text{math}\}.

- Remember that anything can be displayed inline or display, just because I show markup as display it doesn’t mean it can’t be displayed inline!

- **Subscripts and Superscripts** use _ and ^ respectively before the character to be raised or lowered.
  i.e. \{\text{math:display}x^2 + y^2 = 1\text{math}\}

  \[ x^2 + y^2 = 1 \]

- You can place subscripts on superscripted entities.
  i.e. \{\text{math:display}x_2 = x_1^2\text{math}\}

  (not displayable in Word)

- **Grouping together** Sometimes you want to place more than one thing in a subscript or superscript (or other places…)
  To do this, you place the markup in braces ({} & {}). i.e. \{\text{math:display}y=e^{ix}\text{math}\}

  \[ y = e^{ix} \]

- You can use braces to markup superscripts or subscripts inside superscripts and subscripts. i.e.
  \{\text{math:display}x_2 = e^{x_1^2}\text{math}\}

  (not displayable in Word)

- **Greek letters and other special characters** You can write these by knowing the T E X macro name for them. For Greek characters this is a backslash followed by the english name for the letter. (Use a starting capital letter for the capital letter.) i.e. \{\text{math:display}\Theta = \theta + \pi\text{math}\}
$\Theta = \theta + \Pi$

- There are some other characters that you may find useful:

\begin{itemize}
  \item \{math\}\texttt{\le{math}} - less than or equal to
  \item \{math\}\texttt{\ge{math}} - greater than or equal to
  \item \{math\}\texttt{\circ{math}} - circle
  \item \{math\}\texttt{\pm{math}} - plus or minus
\end{itemize}

- [http://www.math.union.edu/~dpvc/jsMath/symbols/welcome.html](http://www.math.union.edu/~dpvc/jsMath/symbols/welcome.html) has a full list of symbols for this plugin.

- \textit{Fractions} The \LaTeX\ macro \texttt{\frac} provides fraction support. Write \{math\}\texttt{\frac{numerator}{denominator}\{math\}} e.g. \{math:display\}\texttt{\frac{1}{1+x^2}\{math\}}

  (not easy to display in Word)

- \textit{Square Roots} For square roots type \texttt{\sqrt} followed by what is to be rooted in braces: e.g. \{math\}\texttt{\sqrt{x}\{math\}} is $x$.

- \textit{Other Roots} use \texttt{\sqrt[n]} for the $n$th root: e.g. \{math:display\}\texttt{\sqrt[q]{10^p}\{math\}} = \texttt{\sqrt[q]{\{10\}^p}\{math\}}

  NOTE: You can use this notation for numbers so \texttt{\sqrt[3]{3}} is the cube root.

We can now write reasonably complex equations, such as:

\{math:display\}\texttt{x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}\{math\}}

We cannot currently write equations/formulae containing sin, cos or log etc. because {math}\texttt{sin\ x\{math\}} will be displayed as $\sin x$ i.e. the formula s times i, n and x! To do this we need to tell jsMath/TeX to use math roman font by typing \texttt{\mathrm} followed by the characters in braces. e.g. \{math:display\}\texttt{\mathrm{sin}\ {math\}}

\begin{itemize}
  \item $\sin$
\end{itemize}

However, even this isn't enough since \texttt{\mathrm{sin}\ x\{math\}} doesn't display a space between the sin and the x. You need to write \{math\}\texttt{\mathrm{sin}\ x\{math\}} to get a decent representation: $\sin x$

Now this is an awful lot of work for simply writing $\sin x$ so you'll be glad to know that \LaTeX\ has several macros to shorten your load: \texttt{\sin\{x\}} \texttt{\cos\{x\}} \texttt{\log\{x\}} \texttt{\ln\{x\}} and others but it's helpful to
know how to get it to work if \( \text{TEX} \) doesn't have what you're looking for already.

We can now write the trigonometric identities: e.g.  
\[
\cos^2{x} + \sin^2{x} = 1
\]

\(\cos^2{x} + \sin^2{x} = 1\)

And the hyperbolic identities: e.g.  
\[
\cosh^2{x} - \sinh^2{x} = 1
\]

\(\cosh^2{x} - \sinh^2{x} = 1\)

Although jsMath contains only a small part of \( \text{TEX} \) this primer only covers a tiny proportion of what it can do. For further details consult a \( \text{TEX} \) book (or even the \( \text{TEX} \)book), an online tutorial, or a local \( \text{TEX} \)pert. There should be plenty of them in maths department... ;-) 

Another place to look might be the jsMath homepage at  
http://www.math.union.edu/~dpvc/jsMath/ . We can't use the current version of this tool due to technical difficulties so your mileage may vary when comparing functionality but the examples should all work on this site.