

14th European Tcl/Tk User Meeting

The evolution of the Tccler's Wiki

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Origins

- 1999 - second oldest Wiki still going
- wikit - written by Jean-Claude Wippler
- minimal markup
- Web + Tk renderer
- self-contained
- Metakit database

Transitions

- used for embedded documentation
- Metakit to TDBC + SQLite
- embedded web server to Wub
- searching from internal to Google to internal
- added markup
- styling

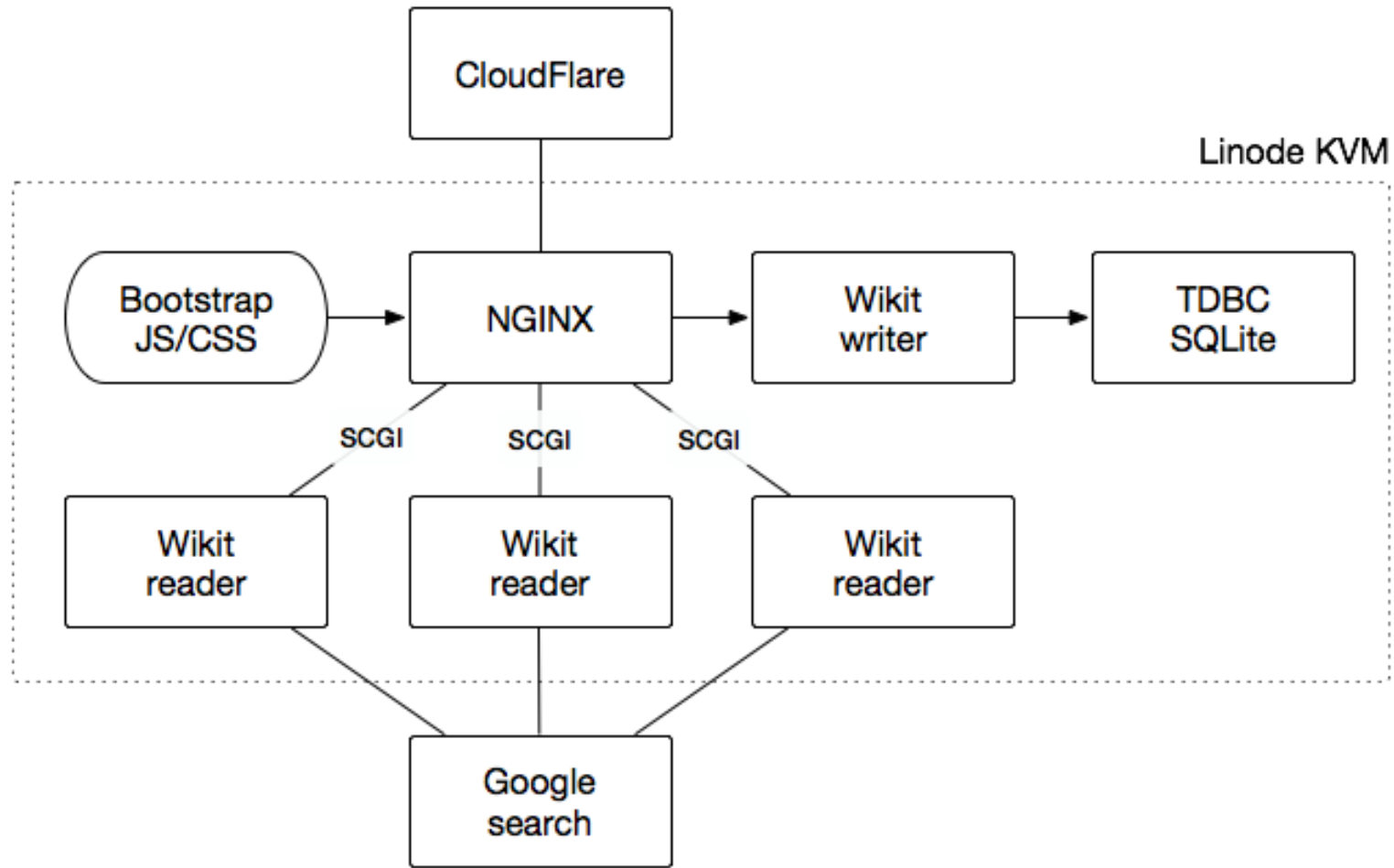
Issues

- page numbers
- searching
- curation
- spam
- look and feel
- code maintenance

Opportunities

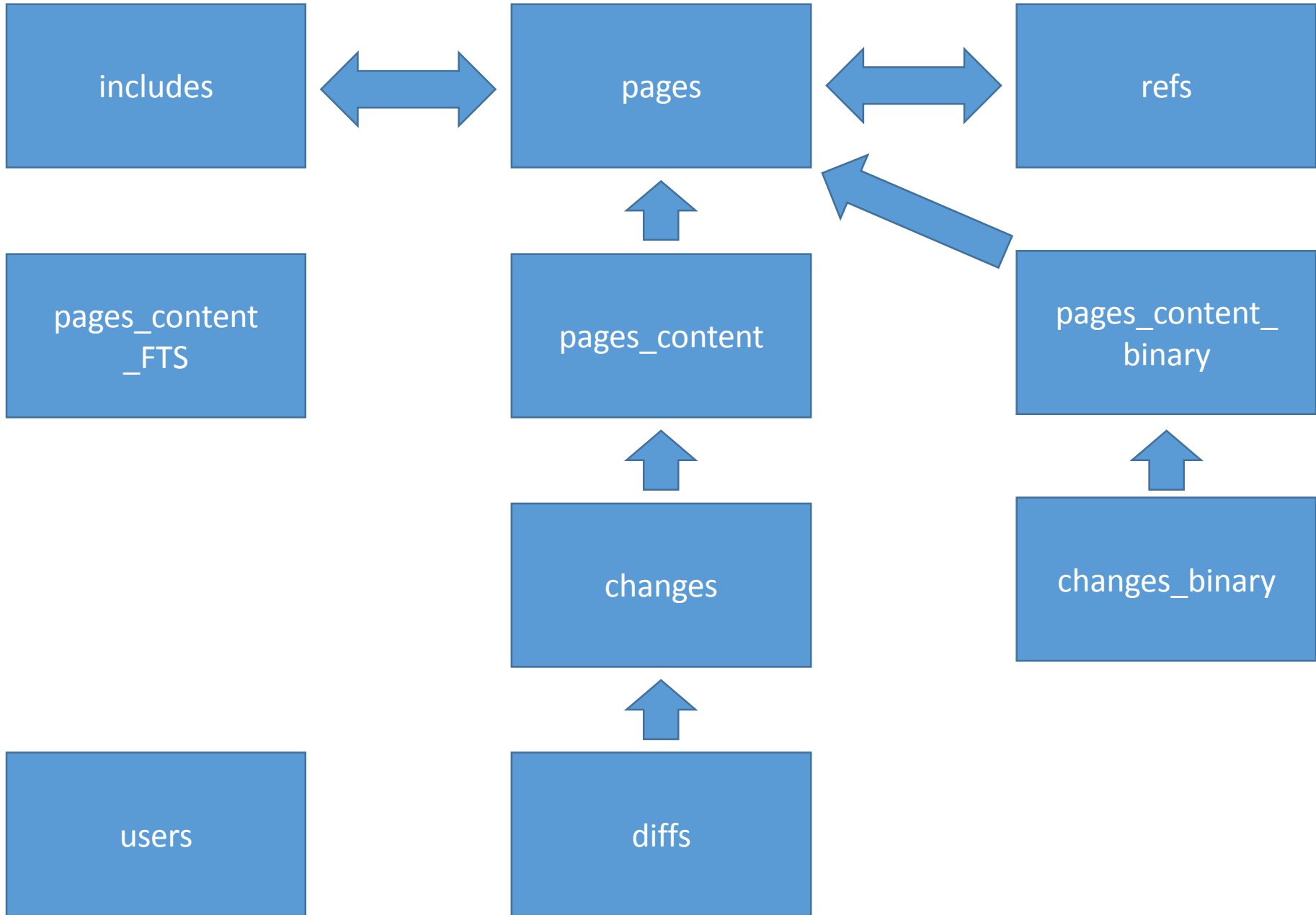
- modern look
- developer support
- 3rd party solutions for web, cache, security, search
- spam mitigation
- curation support
- improved markup

Nikit Architecture



Database

- SQLite3
- Same DB-schema as 2007 rewrite by Kevin and Colin
- Primary key is now page name, no longer an integer page ID
- Writes serialized to writer process
- Readers open database in read-only mode, requires modified `tdbc::sqlite3`



Database Convert

- Use page name as primary key
- Remove empty pages
- Keep old page-ids to be able to support existing links to the Wiki

• Convert results:

Total number of pages	44385
Number of non empty text pages with date	13396
Number of non empty binary pages with date	1634
Number of pages without date	27442
Number of text pages without content	1891
Missing	22
Skipping	28

- Don't create new pages until edited for the first time

SCGI

- Started as test to use Apache, Nginx or Wub as server for Wiki
- Based on Tcllib's ncgi and <http://wiki.tcl.tk/19760>
- One writer process, serializes writes
- Multiple reader processes, load balancing by nginx

Nginx

- Scalable
- Easy to configure
- Commonly used, a lot of info/help available

Markup

- Full rewrite
- Compatible with Wikit markup
- Optional HTML, Markdown or Tcl (in safe interp with cpu limit) pages

Style

- Bootstrap based
- Responsive layout
- Menu on top

Detailed Recent Changes

- Default recent changes shows latest edit per page
- Detailed view shows each edit, including minor edits and spam

Access Rights

- Roles:
 - read: any user
 - write: username provided, cookie set, “Edit Login”
 - trusted: got username and password from admin user, “Session Login”
 - gnome: trusted user with gnoming privilege (edits not shown in default Recent Changes)
 - area: trusted user who can edit access rights per page
 - admin: trusted user with full access

Access Rights

page name	description	needed login	required access rights
/blame/<page>	Show by who and when lines were added.	none	read
/cleared	Show cleared pages.	none	read
/delete	Delete a page	edit	admin
/dependent/<page>	Show list of pages depending on specified page	maintainer	admin
/diff/<page>?V=<version1>&D=<version2>	Show differences between versions of a page. Default for version1 is latest version, default for version2 is version preceding version1.	none	read
/edit/<page>?A=<0,1>&V=<version>	Edit a page. Set A to 1 to add a comment, default is 0. Set V to edit a specific version (used when reverting).	edit	write
/editarea/<page>	Edit page privilege area.	edit	area, write
/gsearch?q=<search_string>	Search the wiki with Google custom search.	none	read
/history/<page>?S=<version>&L=<count>	Show page history. Set S to start version (default is latest version). Set L to number of versions per page (default is 25).	none	read

Access Rights

<code>/image/<page>?V=<version></code>	Show image. Set V to version to show (default is latest version).	none	read
<code>/login</code>	Edit-login	none	none
<code>/logout</code>	Edit-logout	none	none
<code>/new</code>	create new page	edit	write
<code>/page/<name>?T=<0,1>&R=<0,1></code>	Show page. Set T to 1 to get unrendered markup (default is 0). Set R to 0 to disable redirects (default is 1)	none	read
<code>/page/help</code>	show help page	none	read
<code>/query</code>	Query the SQLite database.	none	admin
<code>/recent?A=<0,1>&L=<count></code>	Show recent edits. Set A to 1 to show all individual edits, minor edits and spam (default is 0). Set L to number of changes to show (default is 100 if A set to false and 200 if A is set to true).	none	read
<code>/ref/<page>?A=<0,1></code>	Show list of pages referencing specified page. Set A to 1 to return HTML for inclusion in another page. Set A to 0 to return information as a page. The default value for A is 0.	none	read
<code>/rename/<page></code>	Rename page.	edit	admin

Access Rights

<code>/revert/<page>?V=<version></code>	Revert page to specified version. If no version is specified, revert is done to previous version.	edit	admin
<code>/revision/<page>?V=<version>&T=<0,1></code>	Show specific revision of a page. Set T to 1 to get unrendered markup (default is 0).	none	read
<code>/rss</code>	Return RSS change history.	none	read
<code>/search?q=<search_string></code>	Search the wiki with SQLite3 Full Text Search	none	read
<code>/session</code>	Session management.	none	none
<code>/sitemap</code>	Return sitemap.	none	read
<code>/upload/<page></code>	Upload a page.	edit	write
<code>/user/<name></code>	Show recent user activity.	none	read
<code>/users</code>	User management.	maintainer	admin
<code>/welcome</code>	Show welcome page.	none	read
<code>/whoami</code>	Show edit and maintainer login information	none	none

Access Rights

- Check access rights:
 - Read “area” field of page being accessed
 - Look for required role in the ACCESSRULES page
 - Check if user has required role
- Example 1: Wiki
 - * {all {read write}}
 - admin {}
- Example 2: CMS
 - * {all {read} trusted {write}}
 - admin {}

Access Rights

- Example 3: Areas of responsibility
 - * {all {read}}
 - tcl {all {read} tcl {write}}
 - tk {all {read} tk {write}}
 - admin {}

Create trusted users with roles for the different areas: tcl, tk, ...

Minor Edits

- Use “Save as minor edit” save button
- Not listed in default “Recent Changes”
- Listed in “Recent Changes” with all edit details
- Listed in page history

Blame

- Show by who and when a pages was edited
- Show markup

Comparison

- Show difference between page version
- Show markup diff, not rendered diffs

Google Search

- Use google custom search to search the Wiki
- Used from search box
- Sqlite3-FTS search still accessible using /search. Is this still needed for general use? There's /query for maintainers.

History

- Show page history
- Show SPAM indication
- Show minor edits
- Access version comparison and revert

New page

- Create new page
- Set page title
- Set page type
- Edit

Query

- Run SQL queries on the database

Rename pages

- Rename pages using redirect

Delete pages

- Delete page from database
- No traces left

User activity

- List pages edited by specified user

Who Am I?

- Show you login status

Document Types

- `<!DOCTYPE WIKIT>` : page content written in wikit markup, default.
- `<!DOCTYPE MARKDOWN>` : page content written in markdown markup.
- `<!DOCTYPE HTMLPART>` : page content written in HTML.
- `<!DOCTYPE TCL>` : page generated by Tcl script.
- `<!DOCTYPE HTML>` : page written in HTML.

Special Pages

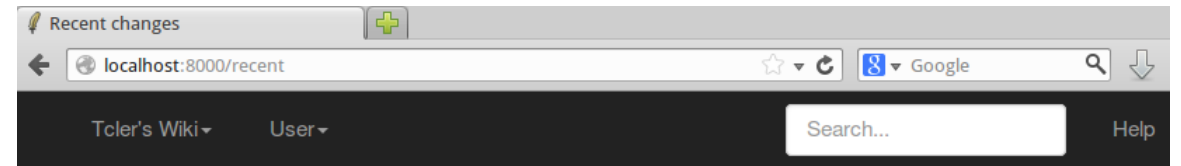
- ADMIN:WELCOME : Welcome page, in Nikit-markup.
- ADMIN:MOTD : Message of the day, in HTML.
- ADMIN:ACCESSRULES : Access rules.
- ADMIN:PRIVACY : Privacy statement.

Page Templates

- `TEMPLATE:page` : Page template, used for almost all pages.
- `TEMPLATE:preview` : Page preview template.
- `TEMPLATE:gsearch` : Google Custom Search template.
- `TEMPLATE:content` : HTML page template.
- `TEMPLATE:CSS` : Nikit specific CSS.
- `TEMPLATE:JS` : Nikit specific JS.

Cookie Consent

- Comply with EU cookie regulations
- Show contents of ADMIN:PRIVACY



Recent changes

Message of the day (html)

Recent changes

[More detail](#)

2016-06-17 Friday

[Test page](#) ▲
[process algebra](#) ▲
[Eagle](#) ▲
[Learn to Program](#) ▲
[island](#) ▲
[Project Euler](#) ▲
[interp](#) ▲
[Image Viewer](#) ▲
[Image Viewer screenshot](#)
[Keith Vetter](#) ▲

init
[escargo@108.162.245.82](#)
[mistachkin@108.162.245.115](#)
[pooryorick@108.162.219.144](#)
[escargo@108.162.245.82](#)
[escargo@108.162.245.82](#)
[EF@141.101.81.86](#)
[kpv@199.27.128.231](#)
[kpv@199.27.128.231](#) image
[kpv@199.27.128.231](#)

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Got it!


Robot/Spam Detection

- Use bogofilter to detect spam when editing a page, need to bring content in good shape first
- Using Google reCAPTCHA if message is SPAM
- reCAPTCHA failed: don't save
- reCAPTCHA passed: save as SPAM
- Mark as SPAM/HAM in history
- Hide SPAM from recent changes
- Show SPAM header


Tcler's Wiki ▾ jdc ▾

Confirm edit for [Learn to Program](#)

Last edit 2016-06-17 13:46:03 by [pooryorick@108.162.219.144](#)

I'm not a robot  reCAPTCHA
Privacy - Terms

Confirm Cancel

Tcler's Wiki ▾ 

Learn to Program

This page is considered **SPAM!**

<<include:name>>

- Include contents of another page in current page

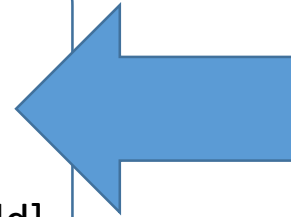
This is Tcl included from [tcl child]

```
<<include:tcl child>>
```

This is HTML include from [html child]

```
<<include: html child>>
```

```
<!DOCTYPE TCL>
puts "<ul>"
foreach t {today tomorrow yesterday} {
    puts "<li>$t : [clock format [clock scan $t]]</li>"
}
puts "</ul>"
```



```
<!DOCTYPE HTMLPART>
```

```
<div class='alert alert-danger'>This page is considered <strong>HTML!</strong></div>
```

<<redirect ?reason?>> name

- Redirect current page to another page
- Known reasons:
 - redundant
 - duplicate
 - merged
 - inaccurate
- Redirect headers



jdc

This page has become redundant. It now redirects to: **Jos Decoster**



Jos Decoster

You were redirected to this page because the **redirecting page** is redundant.

<<motd>>

- Include contents of ADMIN:MOTD

<<changes>>

- Include list of 10 most recent changes

<<toc>>

- Include table of contents for page
- Based on headers used in page
- TOC also shown in menu

<<categories>> or <<tags>>

- Page categories separated by | sign
- Rename category with %|%
- “Category” can be omitted

<<inlinehtml>>

- Insert HTML within Wiki markup.

<<backrefs?:name?>>

- Include pages referencing this or specified page

<<discussion>>

- Show/hide part of a page

Tables

- One row per line:
 - Table header: %|...|...|%
 - Table row: |...|...| or &|...|...|&
- One field per line:
 - Start header row: +%
 - Start row: + or +&
 - Start field: |

```
% | 1 | 2 | 3 | %      +%
| 4 | 5 | 6 |          | 1
| 7 | 8 | 9 |          | 2
| 3
+
| 4
| 5
| 6
+
| 7
| 8
| 9
```

Special Characters

- `<
`
- `<<nbsp>>`
- `<<pipe>>`