

## The evolution of the Tclers 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

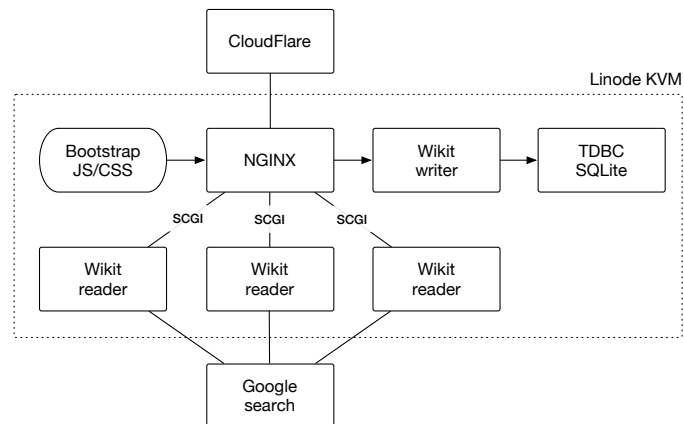
## Opportunities

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

## Nikit

- modern look based on Bootstrap
- NGINX load balancing, proxying web server
- Wikit running as an SCGI
- SQLite for database
- CloudFlare for cache, security, acceleration
- Google search

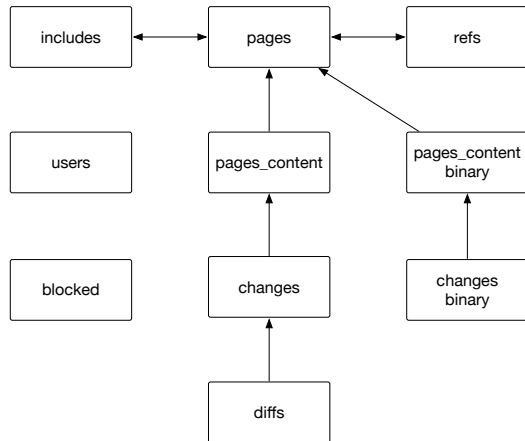
## Nikit Architecture



## Database

- SQLite3
- schema based on 2007 rewrite by Kevin and Colin
- primary key is now page name (not integer)
- writes serialized via single writer process
- multiple readers

## Schema



## Database conversion

- page name as primary key
- removed empty pages
- old page-ids retained to support existing links
- new pages not created until first edit

## Page stats

total number of pages	44385
text pages with date	13396
binary pages with date	1634
pages without date	27442
text pages without content	1891
missing	22
skipped	28

## SCGI

- single thread programming
- multiprocessing
- pool of pre-started scripts
- load balancing by nginx
- based on Tcllib's cgi and <http://wiki.tcl.tk/19760>

# NGINX

- scalable and performant
- easy to configure
- large and growing user base
- lots of info/help available

# CloudFlare

- performance
  - distributed cache + CDN
  - content optimization
  - DNS
- security
  - DDoS protection
  - web application firewall
  - SSL + IPV6
- analytics

# Styling

- bootstrap based
- responsive layout
- adaptive menu on top

## yield

**yield**, a [Tcl Commands]%built-in Tcl command, exits the current coroutine without destroying it, returning a value in the process.

### Synopsis

**yield** ?value?

### See Also

[yieldto](#)

instead of yielding a value directly, execute a command in place of the current coroutine context, which then returns a value.

[tcl:unsupported:yieldm](#)

an experiment in passing multiple values to a coroutine. [yieldm](#) turned out to be trivial to implement in terms of [yieldto](#).

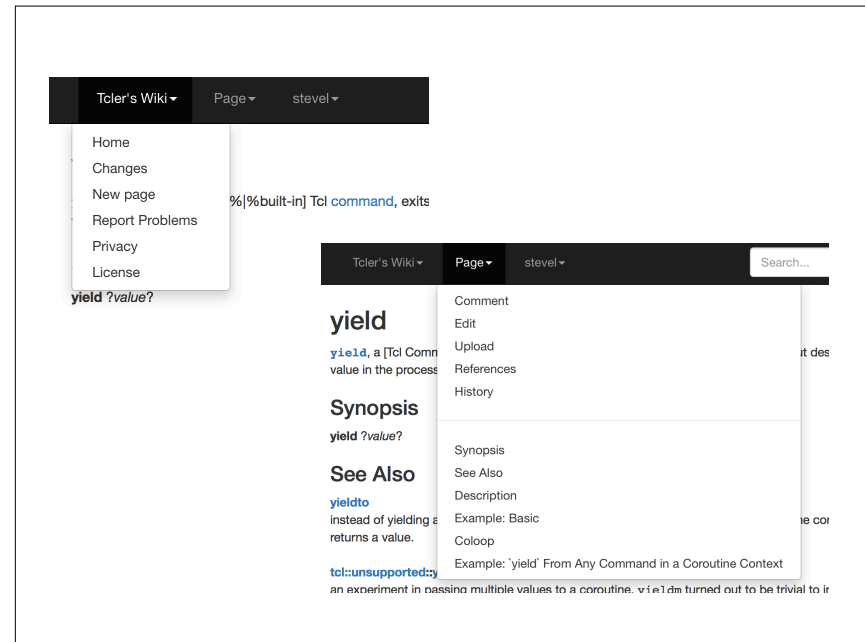
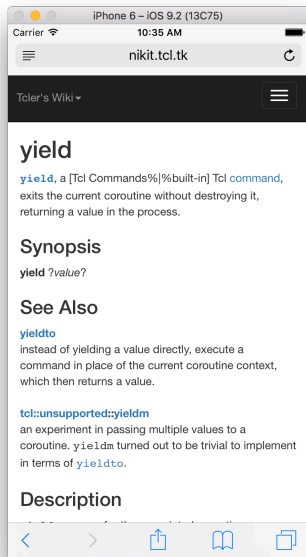
### Description

**yield** arranges for the associated coroutine command of the current coroutine to return *value* if it is provided, or the *empty string* otherwise. The current coroutine context continues to exist. The next time the associated coroutine context command is executed, any argument passed to it becomes the return value of the **yield** that previously exited the coroutine context. If the associated coroutine context command is not given an argument, the return value of **yield** is the *empty string*.

DKF: Can also be thought of as a magical form of [return](#). That itself returns (possibly).

### Example: Basic

```
proc onetwo {} {  
  yield [info coroutine]  
  yield 1  
  return 2  
}
```



## Changes Page

- last edit per page
- minor edits hidden by default
- minor edit / spam flags
- geo-located region

## Minor Edits

- “Save as minor edit” button
- not listed in default Changes page
- listed in page history

## Access Rules

- based on roles
- per page
- per area (e.g. admin pages, CSS templates)

## Roles

- read
- write (username supplied)
- trusted (authenticated via username / password)
- gnome (edit not shown in default Changes)
- admin

## Introspection

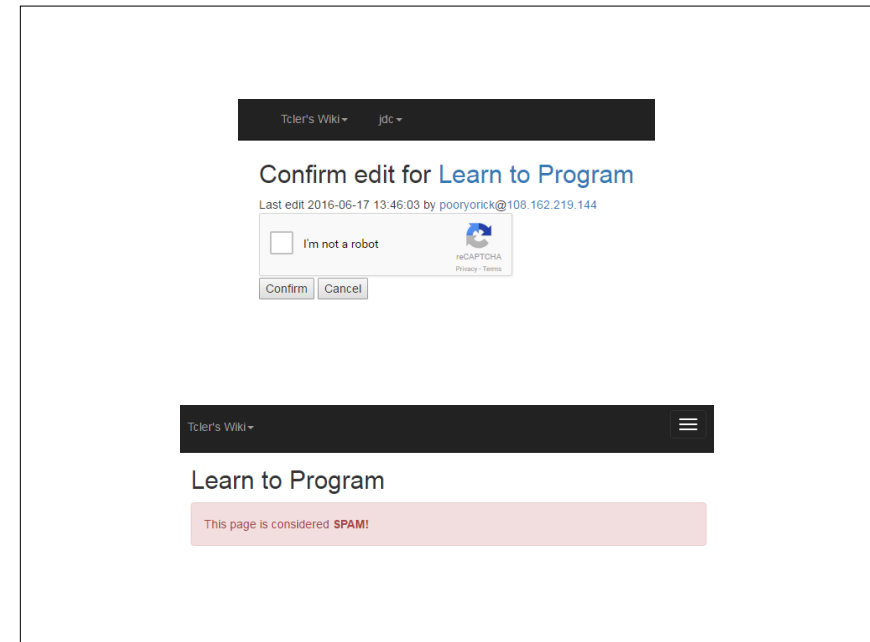
- user activity
- page history
- spam

## Maintenance

- rename pages
- delete pages (no trace left)

## Robot / Spam Detection

- reCAPTCHA
- bayesian filter
- spam hidden by default
- posting prevented from “spammy” IP addresses
- trusted users can mark as spam or ham



## Markup

- full rewrite
- compatible with Wikit markup
- optional
  - HTML
  - Markdown
  - TCL (in safe interp with CPU limit)

## Markup

- document types
- special pages
- page templates
- directives
- tables
- special characters

## Document Types

<code>&lt;!DOCTYPE WIKIT&gt;</code>	page content written in wikit markup
<code>&lt;!DOCTYPE MARKDOWN&gt;</code>	page content written in markdown
<code>&lt;!DOCTYPE HTMLPART&gt;</code>	page content written in HTML
<code>&lt;!DOCTYPE TCL&gt;</code>	page generated by Tcl script
<code>&lt;!DOCTYPE HTML&gt;</code>	page written in HTML

## Special Pages

<code>ADMIN:WELCOME</code>	Welcome page, in wikit markup
<code>ADMIN:MOTD</code>	Message of the day, in HTML
<code>ADMIN:ACCESSRULES</code>	Access rules
<code>ADMIN:PRIVACY</code>	Privacy statement

## Page Templates

<code>TEMPLATE:page</code>	Default page template
<code>TEMPLATE:preview</code>	Page preview template
<code>TEMPLATE:gsearch</code>	Google custom search template
<code>TEMPLATE:content</code>	HTML page template
<code>TEMPLATE:CSS</code>	Nikit specific CSS
<code>TEMPLATE:JS</code>	Nikit specific JS

## Directives

<code>&lt;&lt;include:page&gt;&gt;</code>	include another page
<code>&lt;&lt;redirect ?reason?&gt;&gt;</code>	page redirect to another page
<code>&lt;&lt;motd&gt;&gt;</code>	display message of the day
<code>&lt;&lt;changes&gt;&gt;</code>	include 10 most recent changes
<code>&lt;&lt;categories&gt;&gt;</code>	page categories
<code>&lt;&lt;discussion&gt;&gt;</code>	show/hide part of page
<code>&lt;&lt;inlinehtml&gt;&gt;</code>	insert HTML within Wiki markup
<code>&lt;&lt;backrefs?:name?&gt;&gt;</code>	include page references for this or specified page



## <<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

Tcler's Wiki - Page - jdc - Search... Help

jdc

This page has become redundant. It now redirects to [Jos Decoster](#)

Tcler's Wiki - Page - jdc - Search... Help

Jos Decoster

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

## Tables

- one row per line

```
% | 1 | 2 | 3 | %      + %
| 4 | 5 | 6 |          | 1
| 7 | 8 | 9 |          | 2
+                      | 3
```
- one field per line

```
- header % | ... | ... | %      +
| ... | ... | or & | ... | ... | &
+                      | 4
| ... | ... | ... | ... | ... |
+                      | 5
- start header row | %          | 6
+                      | 7
- start row + or | &          | 8
| ... | ... | ... | ... | ... |
+                      | 9
- start field |
```

## Special Characters

```
<<br>>
```

```
<<nbsp;>>
```

```
<<pipe>>
```

# Cookie Consent

- complies with EU cookie regulations
- shows contents of ADMIN:PRIVACY

This website uses cookies to ensure you get the best experience on our website. [More info](#)

Got it!