Delivering enterprise software documentation

on a wiki

Australasian Online Documentation and Content Conference (AODC)
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Agile development
Workflow and tracking
Structure and chaos
Release management
Steering wiki development
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Slide 4: Introduction – The wiki and I

Speaker’s notes:

I’m Sarah Maddox, one of the technical writers at Atlassian. I have more than ten years’ experience as a technical writer and about nine years as a developer before that.

I’m using the current version of Confluence:
* Confluence 2.10
* Standalone HSQL database
* Apache Tomcat 6 web server

For our Atlassian technical documentation, we choose to use **core Confluence functionality** with very little customisation.

This is intentional, so that we are using the same wiki as most of our customers. Following the principle of “**eat your own dogfood**”.

So we, the tech writers at Atlassian, have set up our procedures to work with “Connie” (the pet name for Confluence) more-or-less unadorned.

These procedures are what I’ll be showing you in the next few minutes, along with some hints and tips.
Slide 5: Introduction – Concepts

- **Ooo-er and Aaah**
  - A challenge presented when using a wiki for technical documentation
  - One of the ways to tackle the “ooo-er” moment

- **Plugin**
  - Extends the core functionality of the wiki
  - Similar to an add-on for your browser

- **Space**
  - A logical collection of pages in Confluence
  - Configurable and managed independently within a wiki site
  - See example

Speaker’s notes:

Writing technical documentation requires a level of enthusiasm, determination, sense of humour. Using a wiki, even more so.

You’ll definitely have those “ooo-er, what now?” moments.

As a tech writer, you’ll also be someone who enjoys the “aaah, that’s neat” feeling when the wiki displays the beauty of your documentation and does it just right.

I’ve been circumspect in scattering the “aaah” moments across this presentation. It’s better if you try out a wiki and experience your own moments ;)

Explain the concept of a “**plugin**.”

More about plugins later.

Explain the concept of a “**space**” – discuss and show demo.
Slide 6: Introduction – A space

Live demo of a space:
* Show the Crowd space.
* Show the pages via the left-hand navigation bar.
* Show the Dashboard on my local Confluence instance, with more than one space.
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Slide 8: Agile development

Why is a wiki useful in an agile environment?

On this slide, I have listed the four main tenets of the agile methodology. I’ll go through them quickly now.

The rest of this presentation describes how we use Confluence in an extremely agile environment.

We have come to value… Responding to change: How a wiki helps with responding to change:

* Developers like wikis (geeky enough) and will contribute to the documentation during each iteration, speeding up the process of document development and review.
* Wiki provides instant (gratification) publication.
* Wiki reduces bottlenecks that can occur with strict publication workflow and/or scarcity of technical writers.
* Technical writers monitor the updates and comments via RSS.
We have come to value… Customer collaboration: How a wiki helps with customer collaboration:
* Customers can comment on documentation pages.
* Selected customers (community developers) can even update the pages.
* Customers can subscribe to RSS feeds or watches, to monitor the documentation themselves.

We have come to value… Individuals and interactions: How a wiki promotes dealing with individuals and interactions:
* All of the above.

We have come to value… Working software …
* Oh dear. But that’s off topic. You may find some answers in a blog post or two:
  http://ffeathers.wordpress.com/2008/01/20/the-agile-technical-writer/
  http://ffeathers.wordpress.com/2008/01/26/the-agile-technical-writer-ii/

**Background information:**
How about documentation of internal processes? We use an internal wiki too.
* It holds our team guidelines and other information. Descriptive rather than prescriptive.
* It’s great for communication via news items and comments.

If we want to change a guideline:
* Discuss at standup.
* Assess impact on existing documentation.
* Get agreement, probably at next standup.
* Update the guidelines --- any team member can do this. Even other Atlassians can. We're watching the RSS feed, after all.
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Slide 10: Workflow and tracking

- Create, review and publish a page
- Track the page history
  - View all versions of the page
  - Revert to a previous version of a page
  - View a “diff”
- Set permissions
- Monitor via RSS and “watches”
- Look at some real-life comments

Speaker’s notes:
Let’s take a quick look at the workflow, what there is of it, for:
* Creating a page.
* Keeping the page hidden from most viewers until fully reviewed.
* Reviewing the page.
* Publishing the page.

Then let’s see how you can keep track of updates in your wiki.

Note:
The wiki does not provide built-in workflow functionality. We have devised our own procedures around the out-of-the-box Confluence functionality.

There are alternatives, available via plugins. Specifically, the Approvals Workflow plugin, written by a third party. You can find information about the plugin here: http://confluence.atlassian.com/display/CONFEXT/Approvals+Workflow+Plugin
Also the **Content Publishing plugin:**

http://confluence.atlassian.com/display/CONFEXT/Content+Publishing+Plugin

We’ll discuss plugins again later.
Slide 11: Workflow and tracking 1

- Create a page with restricted permissions

These procedures are based on core Confluence functionality. There are alternatives that make use of plugins.
Slide 12: Workflow and tracking 2

- Review via comments and updates
- Unhide when ready to publish

Speaker’s notes:
The lock icon means restricted viewing has been applied to this page.
Reviewers can:
* Update the page itself, and add a mini-comment about their update.
* Add a comment to the page.

Author can track the updates, apply more changes and remove comments. When ready, publish by removing the page restrictions.

Technical information:
The wiki page in this example lists two useful workflow plugins:
* Approvals Workflow plugin:
  http://confluence.atlassian.com/display/CONFEXT/Approvals+Workflow+Plugin
* Content Publishing plugin:
  http://confluence.atlassian.com/display/CONFEXT/Content+Publishing+Plugin
About these plugins:
* They are developed and supported by a third party i.e. not Atlassian.
* We don’t use them, because they don’t quite suit the requirements of our documentation space.
* Many customers use them with success.
Slide 13: Workflow and tracking 3

- Track the page history, revert and view a “diff”

Workflow and tracking 3

- Page history shows all updates
- Revert to a previous version if necessary

Live demo
Slide 14: Workflow and tracking 4

Speaker’s notes:
Confluence has a fairly robust and granular permissions scheme.

**Global permissions** apply as defaults across the entire site. (Not shown above.)

**Space permissions** apply to a space. They are quite granular:

Using space permissions, you can grant a permission level to one or more groups, and/or to one or more users, and/or to anonymous users i.e. people who have not logged in.

Overview of the space permissions:

* “View” --- allow people to see content in the space.
* “Pages” --- allow people to create pages; export to PDF/Word; set page-level permissions; remove pages.
* “News” --- allow people to create news items (blogs); remove news items.
* “Comments” --- allow people to create comments (blogs); remove comments.
* “Attachments” --- allow people to create attachments; remove attachments.
* “Mail” --- allow people to remove archived email messages.
* “Space” --- allow people to export the space to PDF/HTML/XML; administer the space.
Page-level permissions (not shown above) --- we have already seen how you can use page-level permissions to restrict viewing of a page. You can:

* Restricting viewing of a page to certain people/groups.
* Restricting editing of a page to certain people/groups.
Slide 15: Workflow and tracking 5

Speaker’s notes:
Watching a page or a space:
* To watch a page, select “Watch” from the “Tools” menu.
* You can watch a whole space too, from the space “Advanced” view.
* “Watch” notifications are sent to your email address.

Using RSS feeds:
* Use the Confluence feed builder to define your feed.
* Choose how to read the RSS messages – via an RSS reader or an email client like Thunderbird.

Technical information:
Some useful RSS readers…
Sage feed reader in Firefox

Sage is an add-on to your Firefox browser. To install Sage:

* Start Firefox.
* Go to this web page: https://addons.mozilla.org/en-US/firefox/addon/77
* Click the “Add to Firefox” button.

To add a feed to Sage:

* Copy the feed URL from the source (e.g. the Confluence feed builder, or an RSS link on a web site).
* Click the Sage icon (a green leaf) in your Firefox toolbar.
* The Sage feed panel will appear on the left. Right-click in the top left Sage panel and select “New Bookmark”. Note that Firefox treats the feeds as bookmarks.

To read your RSS feeds:

* Click the Sage icon (a green leaf) in your Firefox toolbar.
* The Sage feed panel will appear on the left. Select your feed in the top left panel.
* The blog posts will appear in the bottom left panel, and their content will appear in the right panel.

Other readers for Mac OS X:

* NetNewsWire
* Vienna
* Shrook

Other readers for Windows:

* Feeddemon
* SharpReader
* Omega Reader

Other readers for Linux:

* Liferea
* Straw
Web-based readers:
* Google Reader
* NewsGator
* BlogLines

Wikipedia has an extensive list:

And, of course, you can display blog posts on a Confluence wiki page, using the `{rss}` macro. See the documentation:
http://confluence.atlassian.com/display/DOC/RSS+Feed+Macro
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Speaker’s notes:

Thunderbird’s “News & Blogs” folder provides an easy way to manage the updates and comments from your wiki pages:

Define the RSS feed in Confluence and copy the feed URL into Thunderbird.
Page updates show page title with author, date and time.
Comments show “Re:…”.
Open the message to see the detail of the change/comment.
Click through to the wiki page to adjust if necessary.
Delete the message when you’ve finished with it.
Look at some real-life comments

Some customer comments are short, to the point and directly related to the documentation.

Speaker’s notes:

Let’s take a look at some comments people have dropped on the Atlassian documentation.
Some customer comments are full of hard-won and relevant information, which can be copied into the documentation.

“Hi Stefan
Thank you for this information. We have included it in the page, under the heading ‘International Characters in Attachment File Names’.
Cheers - Sarah”
Slide 19: Workflow and tracking 9

"We’re starting to feel the LOVE guys! If you need any help on the integration side, don’t hesitate to contact me.”

Turning disappointment into LUV
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Slide 21: Structure and chaos

- Table of contents within a page
- Left-hand navigation bar showing pages in space
- Index of documentation versions
- Page ordering
- Content re-use

Speaker’s notes:

Many wikis are unstructured. Some may be quite chaotic.

People use the search to find what they need. That works, but for technical documentation you need something more.

You need to show people the scope of the documentation and help them find what they’re looking for even if they don’t know exactly what that is.

Here are some tips and techniques for adding structure to a Confluence wiki.
Slide 22: Structure and chaos 1

Real examples:
The real-life wiki pages displayed on this slide are:

* http://confluence.atlassian.com/display/CROWD/Configuring+Caching+for+an+LDAP+Directory
* http://confluence.atlassian.com/display/CROWD/Crowd+1.5+Release+Notes

Technical information:
How to use the \{toc\} and \{toc-zone\} macros:
http://www.customware.net/repository/display/AtlassianPlugins/Table+of+Contents+Plugin
Speaker’s notes:
An administrator can edit the space layout and add the custom code, to add a left-hand navigation bar to a space.

Live demo:
* Show a documentation space without a left-hand navigation bar --- use the DOCS011 space on my demo version of Confluence
* Now show the DOCS space my demo version of Confluence, which has a left-hand navigation bar.

Real examples:
See the left-hand navigation bar in action in the Crowd documentation:
http://confluence.atlassian.com/display/CROWD/Crowd+Documentation
Delivering Enterprise Software Documentation on a Wiki
AODC 2009 presentation by Sarah Maddox

Technical information:
Customise the layout of the space and add the embedded pages, as described in the Confluence documentation:
http://confluence.atlassian.com/display/DOC/Adding+a+Navigation+Sidebar
Slide 24: Structure and chaos 3

- Documentation version index
- Using spaces as version control mechanism

Speaker’s notes:
As an addition to the left-hand navigation bar, you can list the spaces which contain previous versions of your documentation.
Do this by editing the space layout again and adding another bit of custom code.

Real examples:
See the left-hand navigation bar with version index in action in the Crowd documentation:
http://confluence.atlassian.com/display/CROWD/Crowd+Documentation

Technical information:
Customise the layout of the space and add the embedded page, as described in the Confluence documentation:
http://confluence.atlassian.com/display/DOC/Adding+an+All+Versions+Section+to+your+Navigation+Bar
Slide 25: Structure and chaos 4

Speaker's notes:
You can move a single page or an entire page family. Confluence will respect the new order everywhere: children macro; children display; pagetree macro (e.g. used in the left-hand navigation bar); PDF export; space pagetree view.

Live Demo:
Move a page to a different position, using my demo version of Confluence.

Background:
This is one of the features that the Atlassian technical writers are proud of. And justifiably so. Thanks to our encouragement (read, badgering), page-ordering was included in Confluence 2.8.
It’s also a great example of how technical writers can help to influence the features of a wiki.
Yes, OK, it does help if you work at one of the wiki development companies ;)

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Technical information:

The ins and outs are explained in the Confluence documentation:
* http://confluence.atlassian.com/display/DOC/Moving+Pages+within+a+Space
* http://confluence.atlassian.com/display/DOC/Moving+a+Page
Slide 26: Structure and chaos 5

- Content re-use is alive and well in wikis
- Confluence provides the following macros:
  - \{excerpt\} – Define a re-usable chunk
  - \{excerpt\-include\} – Copy the re-usable chunk into another page
  - \{include\} – Copy the entire contents of one page into another page
- Re-use content within one space or across spaces
- Some blog posts (full URLs are in your handouts):
  - Content re-use on a wiki – http://tinyurl.com/576su6
  - Cross-application plugins – http://tinyurl.com/amypce
  - About the Atlassian Integration Guide – http://tinyurl.com/69ea57

Speaker’s notes:
Some wikis do provide mechanisms for content re-use. Confluence does.
You can dynamically include all or part of a page into another page, via the \{excerpt\}, \{excerpt\-include\} and \{include\} macros.

Live Demo:
* Add a page with a chunk of text enclosed by \{excerpt\} tags.
* Add another page that includes the excerpt via the \{excerpt\-include\} macro.
* Make it clear that the included excerpt is rendered at display time only i.e. it is not part of the source of the page.
Technical information:

Please take a look at these blog posts on content re-use and how we have applied it in specific circumstances:

* http://ffeathers.wordpress.com/2008/07/19/content-re-use-on-a-wiki/
  (Tiny URL = http://tinyurl.com/576su6)

* http://ffeathers.wordpress.com/2008/10/25/cross-application-plugins-and-their-documentation/
  (Tiny URL = http://tinyurl.com/amypce)

  (Tiny URL = http://tinyurl.com/69ea57)

And here’s the Confluence documentation on how to use the macros:

* http://confluence.atlassian.com/display/DOC/Excerpt+Macro

* http://confluence.atlassian.com/display/DOC/Excerpt+Include+Macro

* http://confluence.atlassian.com/display/DOC/Include+Page+Macro
The \{excerpt\} macro

There are people who don't like cheese. Someone even felt brave enough to ask, "[Is it weird to not like cheese?](http://answers.yahoo.com/question/index?qid=20090420185638AAxhrmk)" While we may quarrel with the split infinitive, we have to applaud the transparency and bravery shown by this internaut.

(excerpt)
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The \{excerpt\-include\} macro

\{excerpt\-include:Page with re-usable excerpt\|nopanel=true\}
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Slide 30: Release management

- **Leading up to release date**
  - Work in the “live” space
  - New --- Create new pages with restricted permissions
  - Updates --- Copy existing pages and restrict viewing
  - Follow the usual draft and review procedure

- **Close to release date**
  - Copy space to create snapshot of current release …

- **On release date**
  - Unhide new pages
  - Update content of existing pages
  - Export new release to PDF, HTML and XML …

**Speaker’s notes:**

Let’s assume that your product goes through a regular release cycle, and you want to retain separate documentation for each major version of the product.

Can you do that on a wiki?

Yes. We use **spaces** for our version-control mechanism.
Slide 31: Release management 1

Technical information:
Here’s the documentation on how to use the Copy Space plugin:
* http://confluence.atlassian.com/display/CONFEXT/Copy+Space+Plugin

Here’s the request to provide official support for the plugin:
* http://jira.atlassian.com/browse/CONF-14198
Vote for it 😊
Slide 32: Release management 2

- List of spaces on Dashboard

    Dashboard
    
    Confluence is the enterprise wiki designed to make it easy for you and your team to share information with each other, and with the world.
    
    Spaces: All
    
    - Application Links 1.1
    - Crowd 1.3
    - Crowd 1.4
    - Crowd 1.5
    - Crowd 1.6
    - Crowd single sign-on and identity management
    
    Example comes from Atlassian’s documentation wiki at http://confluence.atlassian.com

    Archive spaces, e.g. CROWD015
    
    CROWD space contains current release

Speaker’s notes:

The Confluence Dashboard shows a list of the spaces in your wiki.
On this slide is an extract from our documentation wiki, listing the spaces for different versions of the Crowd documentation.
Each space holds the documentation for a specific major release of Crowd.
Slide 33: Release management 3

Export major releases to PDF, HTML and XML

“Export Space” option is available based on space permissions

Technical information:
Here’s the documentation on how to use the space export functionality:
* http://confluence.atlassian.com/display/DOC/Exporting+a+Space
Supply the downloadable documentation on the wiki

Example comes from Atlassian's documentation wiki at http://confluence.atlassian.com

Useful for customers who are behind a firewall or using an earlier version of the product

Real examples:
Here is the Crowd documentation page shown on the above slide:

* http://confluence.atlassian.com/display/ALLDOC/Download+the+Crowd+documentation

Here’s the page linking to downloadable documentation for all Atlassian products:
* http://confluence.atlassian.com/display/ALLDOC/Atlassian+Documentation

Technical information:
Here’s the documentation on how to add an attachment to a page:
* http://confluence.atlassian.com/display/DOC/Attaching+Files+to+a+Page
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Documentation on a wiki, by Sarah Maddox
Slide 36: Steering wiki development

- How to make your voice heard
- Plugins
- Core wiki functionality
- DITA and DocBook conversions
Slide 37: Steering wiki development 1

- Plugins extend the core functionality of the wiki
- Similar to add-ons for your browser
- Developed by Atlassian or third party
- Installed into Confluence by an administrator
- Many – see the Confluence Extension pages at the link below

Technical information:

Documentation on installing and managing plugins in Confluence:
* http://confluence.atlassian.com/display/DOC/Installing+Plugins+and+Macros

List of Confluence plugins in the Confluence Extension space, including information on the plugin developer and how to request features or report bugs:
* http://confluence.atlassian.com/display/CONFEXT/Plugin+Index
Slide 38: Steering wiki development 2

- **Copy Space plugin** – already mentioned
- **Gliffy plugin** for diagrams:
  - A commercial plugin which we use in the documentation
  - Drawn on the web page
  - Editable by others, just like a wiki page
  - Displays as a JPEG image

**Real examples:**
A Gliffy drawing in the Crowd documentation:
http://confluence.atlassian.com/display/CROWD/Configuring+Caching+for+an+LDAP+Directory

**Technical information:**
Documentation on installing and managing plugins in Confluence:
* [http://confluence.atlassian.com/display/DOC/Installing+Plugins+and+Macros](http://confluence.atlassian.com/display/DOC/Installing+Plugins+and+Macros)

List of Confluence plugins in the Confluence Extension space:
* [http://confluence.atlassian.com/display/CONFEXT/Plugin+Index](http://confluence.atlassian.com/display/CONFEXT/Plugin+Index)

Documentation for the Copy Space plugin:
* [http://confluence.atlassian.com/display/CONFEXT/Copy+Space+Plugin](http://confluence.atlassian.com/display/CONFEXT/Copy+Space+Plugin)

Documentation for the Gliffy plugin:
* [http://confluence.atlassian.com/display/CONFEXT/Gliffy+Plugin+for+Confluence+-+Diagram+and+Draw+in+Confluence](http://confluence.atlassian.com/display/CONFEXT/Gliffy+Plugin+for+Confluence+-+Diagram+and+Draw+in+Confluence)
Slide 39: Steering wiki development 3

Already achieved in Confluence:
- Copy Space plugin
- Page ordering
- Pagetree macro bundled with Confluence

Still to be done in Confluence:
- Bundling and support of Copy Space plugin
- PDF exports
- Version-specific links to help files

Speaker’s notes:
Technical writers can work with wiki developers, encouraging the development of the features we need.

At Atlassian, the technical writing team is a fairly vocal Confluence user group ;)

Already achieved:
* Copy Space plugin developed for us in September 2007, by a Confluence developer
* Page ordering feature built in Confluence 2.8 (April 2008)
* Pagetree macro (which provides the left-hand navigation bar) bundled with Confluence 2.9 (August 2008)

Even if you’re not an Atlassian employee, you can add requests to, and vote for existing requests on, our JIRA issue tracker.

http://jira.atlassian.com/browse/CONF

Areas to work on / vote for:
* Bundling and support of Copy Space plugin — see http://jira.atlassian.com/browse/CONF-14198.
* PDF exports --- http://jira.atlassian.com/browse/CONF-2079 --- but this one is well known and development is underway.


* More – go to the “CONF” project on our JIRA site and pick an issue.

Use and abuse the wiki.
Tell the dev team what you have achieved.
Tell them what you cannot achieve.
Give lots of praise (ooohs and aaahs) - developers are human too.
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- **DITA to Confluence conversion**
  - Open source project and asking for contributors
  - DITA2wiki converts from DITA to wiki markup
  - Not yet from wiki to DITA

- **Confluence to DocBook conversion**
  - Proprietary solution developed as a Confluence plugin
  - Scroll Wiki Exporter
  - Wiki to DocBook and PDF

**How can you make your voice heard?**
- DITA2wiki project on SourceForge: http://sourceforge.net/projects/dita2wiki/
- Scroll Wiki Exporter: http://www.scrollyourwiki.com

**Speaker’s notes:**
Other initiatives to encourage:
- * DITA2wiki
- * Scroll Wiki Exporter

**Background information:**

**DITA2wiki:**

DITA (Darwin Information Typing Architecture) is an XML-based architecture for designing, writing and publishing technical documentation.

The DITA2wiki project aims to convert content from DITA to wiki (including Confluence) and vice versa.

The DITA2wiki project is now open source and asking for contributors.

* DITA2wiki project on SourceForge --- http://sourceforge.net/projects/dita2wiki/
Delivering Enterprise Software Documentation on a Wiki  
AODC 2009 presentation by Sarah Maddox

* Another blog post --- http://ffeathers.wordpress.com/2008/10/26/playing-with-dita2confluence/  
* Another blog post --- http://ffeathers.wordpress.com/2008/10/26/update-more-dita2confluence/

Wiki to DocBook via the Scroll Wiki Exporter:  
Slide 41: Thank you

- Come up and ask me anything you like
- I have a demo Confluence wiki on my notebook
- Addresses:
  - Email at sarah@atlassian.com
  - Blog at http://ffeathers.wordpress.com
  - Atlassian at http://www.atlassian.com
  - Documentation wiki at http://confluence.atlassian.com

So, the take aways are?
1) Confluence works out of the box for technical documentation.
2) Help us to steer wiki development the way we want it to go.

Thank you :)