NSS Enriching Knowledge for Information and Communication Technology Curriculum Series: (5) Latest Technologies on 'Internet Services & Applications' and 'Wireless Computer Network'

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# The What & Why of Wikis

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# Today's Outline

- Web 1.0 vs Web 2.0
- Why Wikis?
- What are Wikis?
- Wiki-related Issues
- Concluding remarks

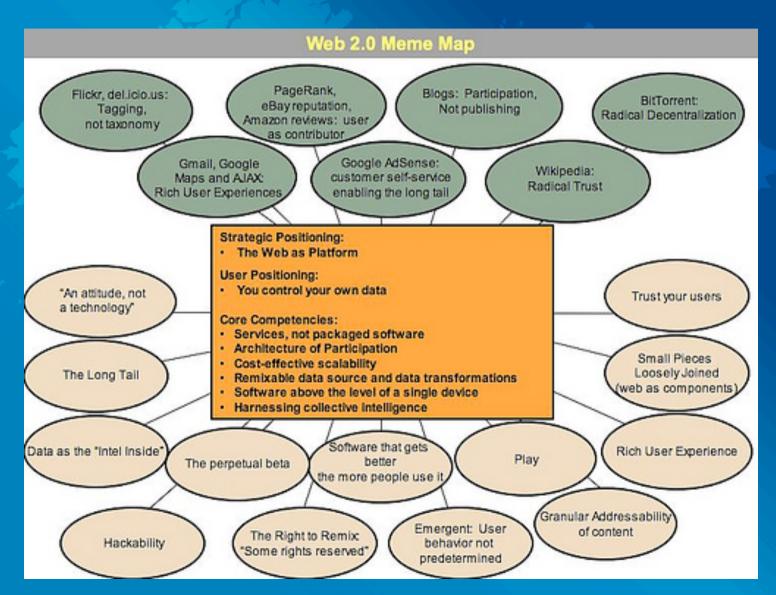
## Web 1.0 vs Web 2.0

- A term proposed by Tim O'Reilly to describe the contemporary web
  - Modern way of using it
  - New tide of web applications
  - "Second generation" web

# Web 1.0 vs Web 2.0

Web 1.0	Web 2.0
HTML, Java, Flash	AJAX, CSS
Website, encyclopedia, CMS	Blog, wiki, wikis
As a book/magazine	As a platform/tool
Company-oriented	User-contributed
B2B and B2C	Audiences = Authors
Fee-based advertising	Free information
Sales channel	Social network
	HTML, Java, Flash Website, encyclopedia, CMS As a book/magazine  Company-oriented B2B and B2C Fee-based advertising

# Web 2.0 Meme Map



## **Summary**

- · Web as a medium vs. Web as a platform
- Technology-centric vs. User-centric
- Individualistic vs. Group/Collective Behavior
- Consumer vs. Producer
- Transactional vs. Relational
- Restrictive vs. Empowerment
- Top-down vs. Bottom-up
- People-to-Machine vs. People-to-People
- Search & browse vs. Publish & subscribe
- Closed application vs. Service-oriented services
- Functionality vs. Utility
- Data vs. Value



## Frustrated About Workflow At Work?

- Information can't be shared easily
- Information can't be managed easily
- Revision can't be recorded easily
- Applications are inflexible and not easily extended

## **How About Wikis?**

- 1995: Ward Cunningham created the first wiki, http://c2.com
  - Inspired by Apple's HyperCard
  - Wikiwikiweb
  - Wikiwiki is a Hawaiian to mean quick
- Wiki is closer to the original idea of web by Tim Berners-Lee: More like a notepad than a book
- Wiki = Wikipedia pedia (knowledge content)

# Wiki's Advantages

- Free
- Open source
- Collaborative document management
- Decentralized control of centralized data
- Simple to set-up & maintain
- Simple to edit
- Indexable and searchable
- Revision control
- Extensible
- Flexible structure (ontology)
- •

## **Corporate Success Stories**

- Nokia has been using Socialtext wiki software for a year and a half to facilitate information exchange within its Insight & Foresight group.
- Yahoo uses Twiki software to help its development team overcome the problems associated with working from a variety of separate locations.
- Michelin China also uses Twiki as a knowledge management tool.
- Jean-Noel Simonnet, from the company's IT department, writes,
  "Our purpose was to share ALL the information, procedures, setup
  documents, so that we were less dependent on a particular staff
  member knowledge, so that nobody in the team has any document
  left in a personal directory."
- Kodak, Cingular, Disney, Motorola, and SAP are also among the notable companies with <u>wiki success stories</u>.

### Wiki's Checklist

### Consider if

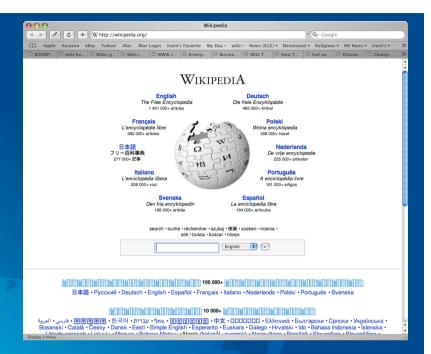
- To establish a company intranet quickly and cheaply without sacrificing functionality, security, or durability
- To publish a range of corporate documents in one universally accessible location and let employees manage those documents with a minimum of effort, lag, and risk of redundancy
- To manage and organize meeting notes, team agendas, and company calendars.
- Need a project management tool that is cheap (if not free), extensible, and accessible through any Web browser.
- Need a central location where shared documents can be viewed and revised by a large and/or dispersed team.

### Might not be useful if

- Need to use complex file formats.
   Some wiki platforms can support only text or HTML files.
- Don't have a staff member who can take responsibility for its use. A wiki is only as good as its ontology (or the search engine it uses). You will need somebody who can establish conventions for naming pages and maintaining links.
- The collaborative format isn't appropriate for your group or workplace. Peer review is not always the best solution for content management.
- Looking for an exchange of views.
   Wikis are not the best tool for airing opinions or carrying on conversations.
   If that's your primary goal, use a blog instead.

## **How About Wikipedia?**

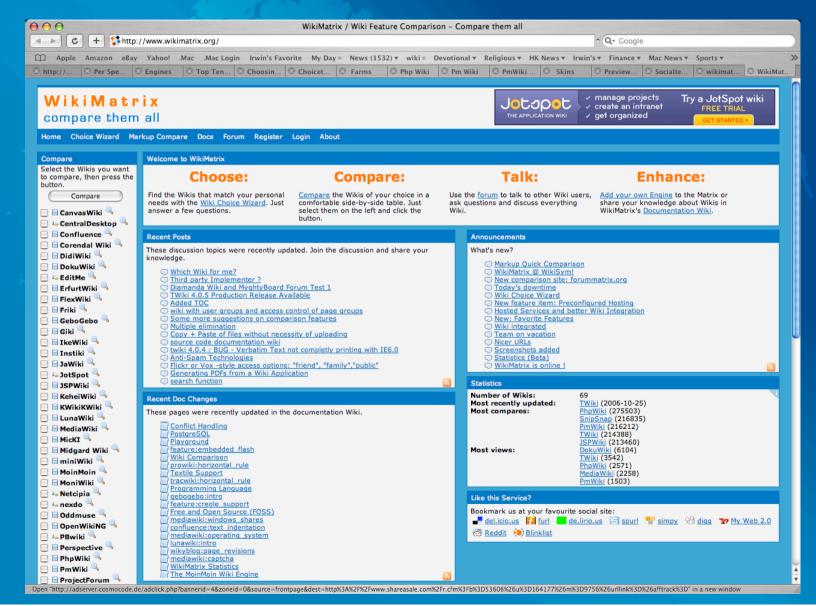
- 2001: Jimmy Wales and Larry Sanger launched Wikipedia, <a href="http://wikipedia.org">http://wikipedia.org</a>
  - The largest and most famous project using wiki in the world
  - Dec 2005: 50,000th Chinese article
  - Mar 2006: 1 millionth English article
  - 1.34 million independent articles (excluding translations)
  - 13.6 edits per page in average
  - > 2 million wikipedians
  - 9000 requests per second
  - > 700Mbit/s outgoing traffic



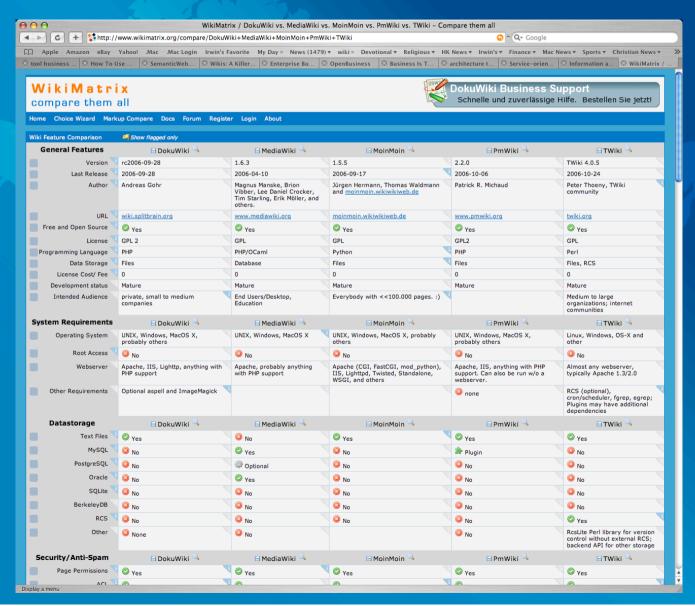
## What Is A Wiki?

- Wiki is defined as "the simplest online database that could possibly work."
- Wiki is a set of web pages that anyone--or at least anyone with permission--can create or edit
- Wiki is an engine to convert wiki text into HTML
- There are many variant of wiki engines: UseMod, Kwiki, Twiki, MoinMoin, PmWiki, MediaWiki, DokuWiki, ...

## Variety of Wikis



# **Comparing Wikis**



# Significance of Wiki

- Separating content from presentation
  - CSS: To take care of the style and layout
  - Wiki: A compact and clean way to write the content in plain text format

Syntax Examples	🗄 DokuWiki 🥄	🗄 MediaWiki 🥄	⊞ MoinMoin 🦠
Internal Link	[[a Link]] [[namespace:link]] [[link With a Title]]	[[a link]] [[a link with title]]	CamelCaseLink or ["free link"]
External Link	[[http://example.com]] [[http://example.com With a Title]]	[http://example.org The title]	http://google.de/ or [http://google.de/ Google] or file:////server/share/file
Headlines	===== Level 1 ===== ==== Level 2 ==== ==== Level 3 === === Level 4 === == Level 5 ==	==Section== ===Subsection=== ====Sub-subsection====	= Level 1 = == Level 2 == === Level 3 === ==== Level 4 ==== ==== Level 5 ====
Bold Format	**bold**	'''bold'''	'''bold'''
Italics Format	//italics//	''italic''	''italic''
Underline Format	underlined	<u>&gt;under l ined</u>	underline
Monospace Format	''monospace''	<tt>monospace</tt>	'monospaced'
Strikethrough Format	<pre><del>strikethrough</del></pre>	<pre><s>strikethrough</s></pre>	(strikethrough)
Superscript Format	<pre><sup>superscript</sup></pre>	<sup>superscript</sup>	^superscript^
Subscript Format	<sub>subscript</sub>	<sub>subscript</sub>	,,subscript,,
Images	{{local.jpg}} {{http://foo.bar/baz.jpg}}	[[Image:wiki.png]]	http://foo.bar/foo.jpg or attachment:foo.jpg
Aligning Text	<b>◎</b> N/A	⊲center>Centered	only in tables:   <(> left   <:> middle   <)> right
Text Indentation	◎ N/A	: indented line	indented text
Bulleted Lists	* item 1 * item 1.1 * item 2	* Item 1 ** Item 1.2 * Item 2	_* Item 1* Item 1.1 _* Item 2
Numbered Lists	item 1 item 1.1 item 2	# Item 1 ## Item 1.2 # Item 2	□1. Item 1 □□a. Item 1.a □1. Item 2
Definition Lists	🖆 Plugin	; term : definition	_term :: definition
Horizontal Rule			

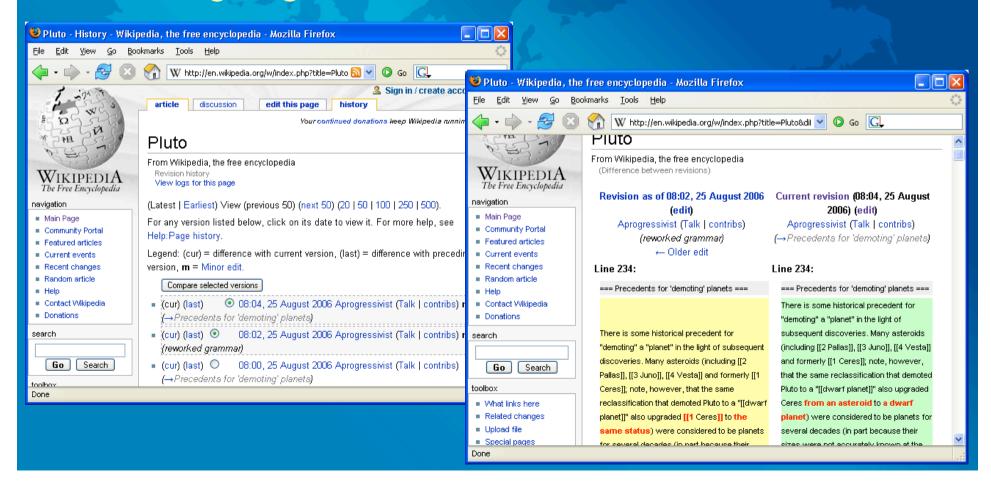
# Strength of Wiki Text

- Fewer elements
  - easier to learn
- Unique representation
  - less confusing to edit
- Clean and compact
  - easy to read and edit
- Tidy
  - easy for machine to format it, and encourages the use of CSS

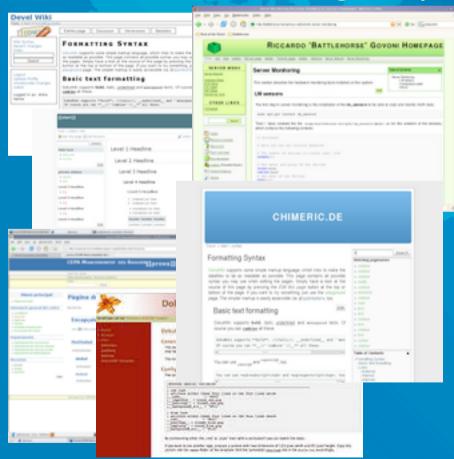
Wiki text	Result	
"italic"	italic	
""bold""	bold	
"""bold and italic"""	bold and italic	
==heading== ===level 2=== ====level 3==== ====level 4====	Headings in different sizes	
[[Link to another page]] [[Link different title]]	Internal Link to another page on the wiki	
http://www.test.org [http://www.test.org Text]	External link Link with description	
[[fr:Page en français]]	Interwiki link to french Wikipedia (appears under "languages")	
[[Category:Example]]	Add article to category "example"	
	horizontal line	
* one	Bullet list	
* two * three		
<pre># one # two # three</pre>	Numbered list	
[[Image:File.jpg Text]] [[Image:File.jpg frame Text]] [[Image:File.jpg thumb Text]]	Image with alternative text Image aligned right with caption Thumbnail	
[[Media:File.ogg]]	Download link	
{{Name}}	Include template "Name"	
~~	Signature (Link to userpage)	
~~	Signature with timestamp	
#REDIRECT [[Other article]]	Redirect to another article	

- Plain text-based
  - Easier to search, index and do statistics
  - Cost-effective to archive the content
- Change log
  - Plain text makes us easier to find changes
  - Easier to do version control

Change log and differences



Extensible using templates and plug-ins



[wiki:plugins]]	<b>D</b> окц	Wii
Backlinks  Edit this page Uld revisions	Recent changes	Searc
Trace: » stylesheets » start » dokuwiki » plugins Plugins	en cs da de es fr hu it ja ko ni no pi ru zh Translations of this pa zh-tw	ge?:
Plugins provide a system of extending DokuWiki's features without the need each update). Below is a list of ready to use plugins created by DokuWiki's users	Plugins Available Plugins (338)	•
A Plugin is installed by putting it into its own folder beyond lib/plugins/. For rusing the plugin manager. Be sure to read Warning on Plugins.  Available Plugins (338)	nany plugins this can be done automatically -creaming riugins -Requesting Plugin	

This is the list of all plugin currently available for DokuWiki. You may filter the list by tags from the cloud to the left or by type:

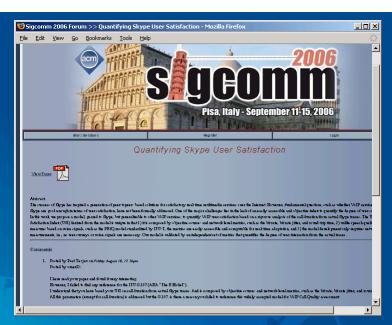
- All
- SyntaxHelper
- Admin
- Action
- Render

Ibundled Ideanup Isecurityrisk aboaccess acl acronym add address adsense advertising aim aiax alias alian alphabet amazon analytics anchor annotation and applet archive aspell atom attachments attendance authentication avatar backlinks backup bar barchart bbcode bibtex bikemap biology blacklist blip.tv blockquote blog blogging bom bookmark bookmarks books boolean boxes broken browse button cache calendar camelcase captcha caption cerberus-helpdesk changelog changes characters Chart charts chat Chemistry chess choices chords citation cite citeulike class cleanup cli cloud code collapsible color colors columns command comment comments configuration contact contracts controlling conversion countdown Counter create creole crossreference CSS csv dailymotion darcs data database date decision definition definitions del deleted delicious development diagram diff digg dilbert dir directory discontinued discussion div dnsbl docbook document doodle download dropdown edit editing editors email embed encryption epigraph event events experimental export extension external extract fck fckeditor feed feedback fen file filelist films filter firefox flash flickr flowcharts flowplayer flv folding folksonomy form format formatting formula fortune fqdn freemind gallery geographic geourl get google googlemap gpsies gpx gpxviewer graph graphing graphs gravatar group groups gtd guestbook gui hcalendar hcard heading headings headline headlines heise hidden hide highlight highlighting hints home homepage hr html hyphen i18n ical icmp icons icq id iframe im imagemap images important include index info input ins inserted internallinks internals international ip ipa isbn jalbum java javadoo javascript joe is ispwiki karin key keyboard keywords kml label language lastfm lastmodification latex layout level lightbox linebreak link linking links list locale locking log logging login logout logs is itr magazine mailing maintenance man management manpage maps markdown marking markup math maybe.broken media medialist mediawiki medical menu meta microformat midi mindmap modes move movie msn mugen multimedia multitemplate music mysql namespace namespaces navigation nbsp new news ninjas non-existent notation note NOtes nroff numbered obsolete out offline opendocument openid openoffice options oracle orphan outdent DAGE page-layout pagebreak pagename pages pagetemplate passwords patch pdf percent permission pgn phonetic php pictures ping pingback player plugins plugintype poll popularity postgresql powerpoint presentation preview printing program programming progress gotd query quotation quote quotes random rating rdp readability recent redirect reference references referrer refworks relativelinks reliwa relocate remarks rename replace repository restore revert revisions route rss rtl ryo s5 schedule science search sectionediting sections server session settings sevenload share sheet shell shortcut shy Sidebar Signature size skill SlideShow smb snippet snmp sort source space spaces SDAM span sparkline spellcheck spoiler spi SOIITE stars startpage static Statistics Status streaming stumbleupon Style style, inj stylesheet styling subpages subversion SVQ SVN switch sympa syndicate SVNtaX table tables tabs tagsloud tagging tags talk tasks top template terms textile time timer timestamp tips title too todo todo-list tool toolbar tooltip trace traceroute track trackback tracker tracks translation tree typography udp untested update upload usag user\_content userpage USETS utf-8 var Variable vcard verse Video vizualisation wanted whois wiki woot WOrd wordcloud wordpress WySiWyg xml yahoo youtube zip

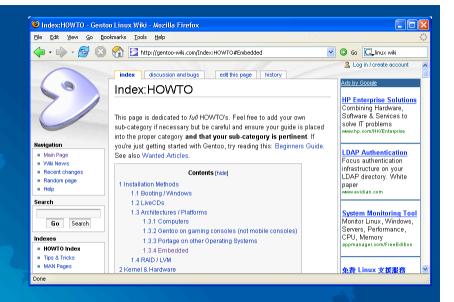
- Browser is the one-stop solution
  - Can do all these:
     Reading, editing, previewing, access control, management, archiving, etc.
  - Changes are instant and direct
  - Shortened the revision cycle

# Wiki Applications

- Course homepages
  - Easier to update and do minor editing (e.g. homeworks, lecture notes)
  - Reduce the workload on homepage maintainence
- Conference homepages
  - Facilitates two-way communication and discussion on research
  - Example: http://sigcomm06.stanford.edu/discussion/



## Wiki Applications

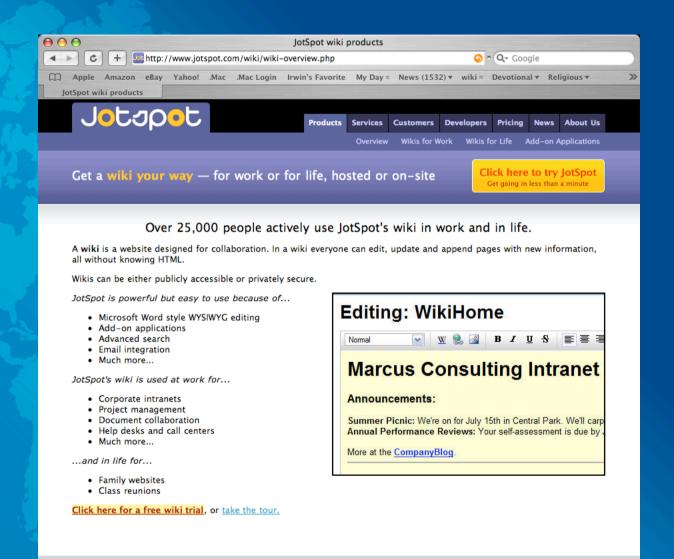


- Documentation and Collaboration
  - Distributed working style
  - Knowledge management and sharing
  - Timely updating
  - Revision control
  - Example: Gentoo Linux Wiki

## **Business Tools**

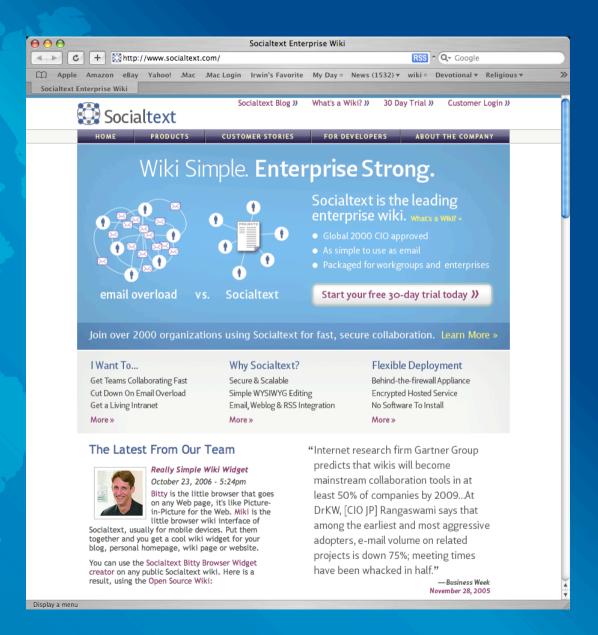
- JotSpot
  - Started by the co-founders of Excite
  - A cross between a wiki and a database
  - Not open-source
  - Additional features to handle forms and external data
- Socialtext
  - Based on the open-source Kwiki
  - Ships a standalone appliance with software installed
- Confluence
  - Composed of almost exclusively of open-source libraries
  - Provides licensees with the source code

## JotSpot



Copyright © JotSpot, Inc. 2004-2006. Security | Sitemap | Privacy Policy | About Us

## Socialtext



## Confluence

### **Features**

Confluence is the enterprise wiki. It provides innovative solutions to the communication problems facing organisational teams today.

Take a closer look at the full set of Confluence's features below.



easy to organise.



Because your organisation is too big for just one wiki.

Archive and index team

Turn any page into a team

Links should never, ever

permissioning and control.

From daily workflow tools to

break. Ours won't.

Enterprise grade

Integration

enterprise systems.

Just a wiki? No, an application platform.

email conversation.

Comments

Search Everything is searchable.

Everything.

Security

discussion forum.



Timely information - notices, bulletins, blogs.



**Attachments** Attach, track and search



Organisation Cross reference, index, search, hierarchify!



Because a picture is worth a thousand words.



### Administration

Powerful, simple admin. No geniuses required.



### **Openness**

Confluence plays well with



Produce and consume RSS newsfeeds.



Not just a pretty face. It works well. It feels right.



### Confluence - Enterprise Wiki Software

+ | ttp://www.atlassian.com/software/confluence/

000

Confluence - Enterprise Wi..

Apple Amazon eBay Yahoo! .Mac .Mac Login Irwin's Favorite My Day = News (1532) ▼ wiki = Devotional ▼

^ Q- Google

>>

ATLASSIAN

Confluence

Support

About



The Enterprise Wiki

Confluence - the Enterprise Wiki

SALES SPACE

Confluence is an enterprise wiki that makes it easy for your team to collaborate and share knowledge.

Adding, sharing and finding content has never been easier.

These benefits come with all the additional features needed to make it a part of your business:

- Enterprise security
- · Simple installation and management
- Attractive, user-friendly WYSIWYG interface · Powerful tools for structuring and searching your wiki
- · Professional features such as PDF export and automated refactoring

DEVELOPMENT SPACE

- An open API for extension and integration
- Atlassian's Legendary Service.

Get a detailed view of Confluence in the feature tour > Learn about wiki solutions using Confluence ▶ Want the latest details? See what's new in Confluence 2 ▶

### Where to Next?

Where can I learn more? View our 10 reasons to use Confluence, a feature tour or download a PDF brochure (140k). Also, check out some Q&A's on wikis and Confluence. For even more reassurance, try our awards and endorsements page.

Who uses it? Over 1,800 organisations from 45 countries - browse testimonials, view customers in your industry or get in-depth case studies.

Feature tour

Try a demo

Buy online

"A sensational product, I have never seen so many colleagues get so addicted to something so quickly."

> - Craig Day (more testimonials...)



Download today!

### Confluence

Why use Confluence?

Feature tour

Try a demo

Licensing and pricing

**Buy online** 

### Who uses Confluence?

The largest commercial wiki -1,800+ organisations globally.

- Customers
- Testimonials
- · Case studies

Display a menu

## **Summary**

- Wiki is a powerful information collaboration platform on the web
- Harness collective intelligence to collect, manipulate, mange, and share information
- It is searchable and indexable
- It is flexible and extensible

### References

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