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

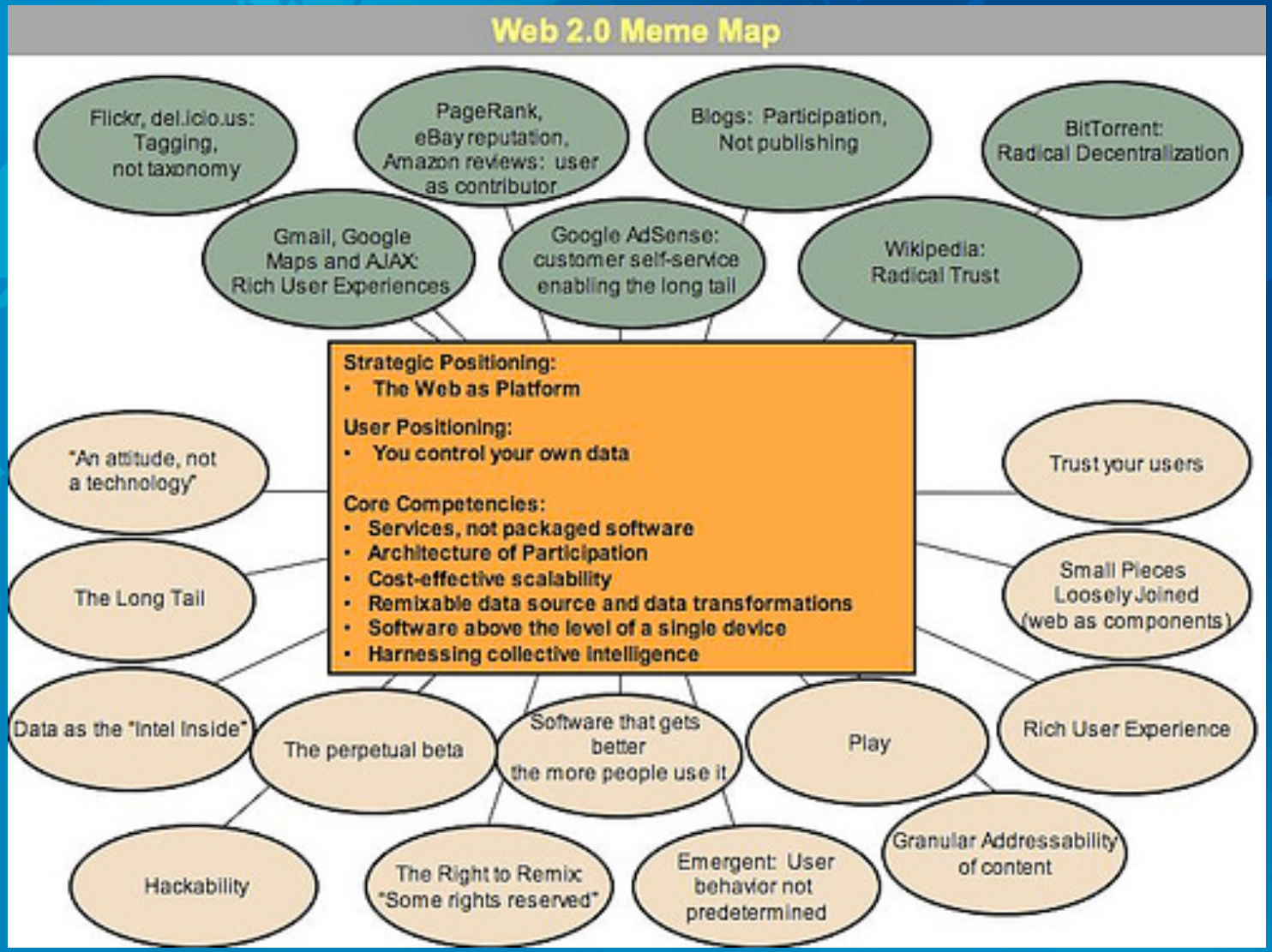
Web 1.0 vs Web 2.0

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

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 wiki success stories.

Wiki's Checklist

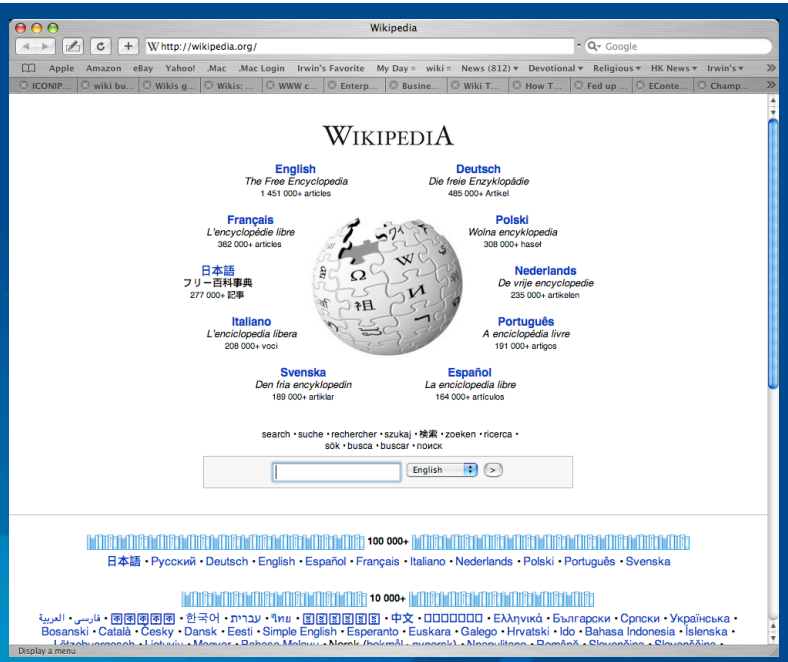
Consider if

- 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?

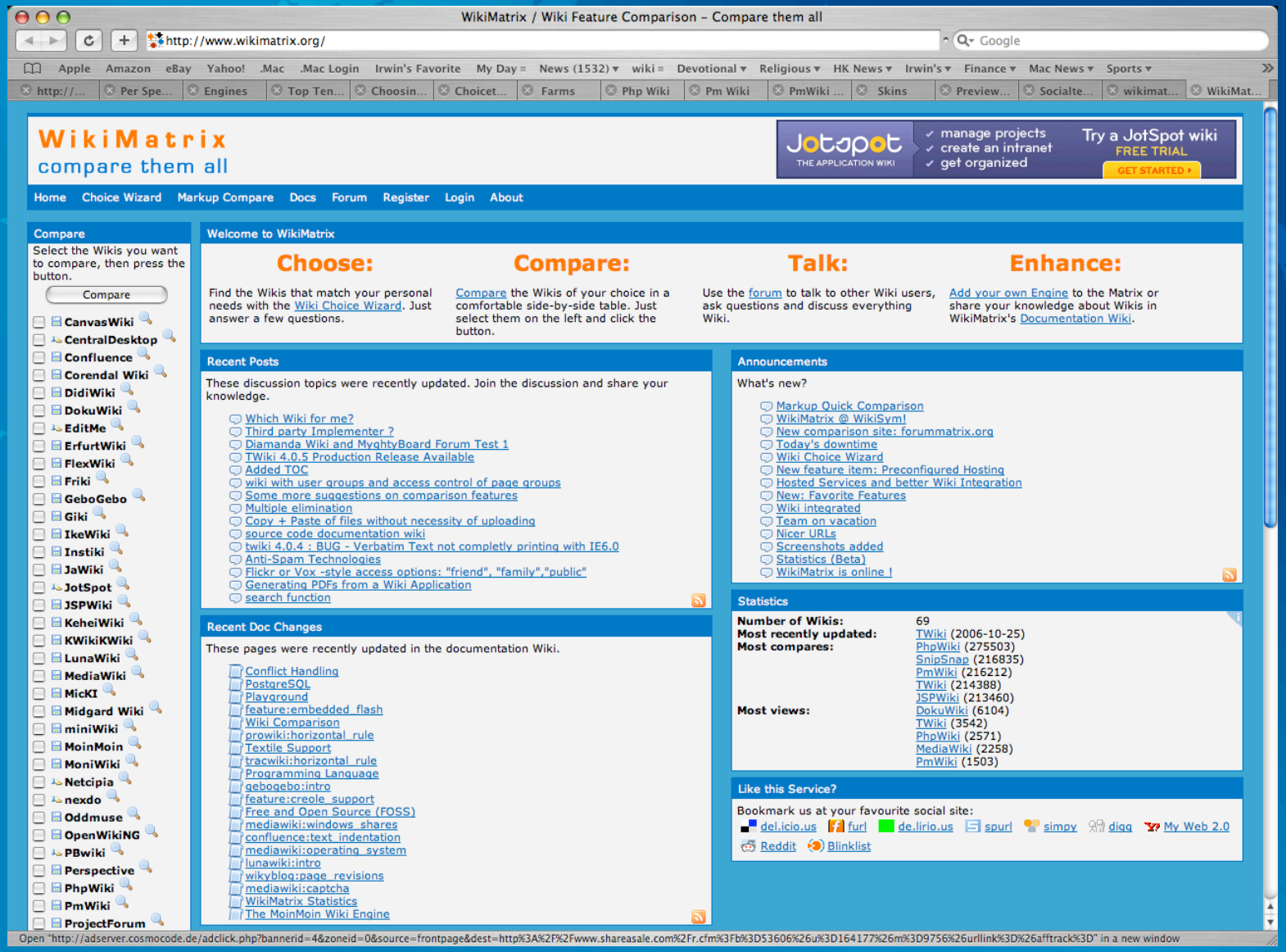


- 2001: Jimmy Wales and Larry Sanger launched Wikipedia, http://wikipedia.org
  - The largest and most famous project using wiki in the world
  - Dec 2005: 50,000th Chinese article
  - Mar 2006: 1 millionth English article
  - 1.34 million independent articles (excluding translations)
  - 13.6 edits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

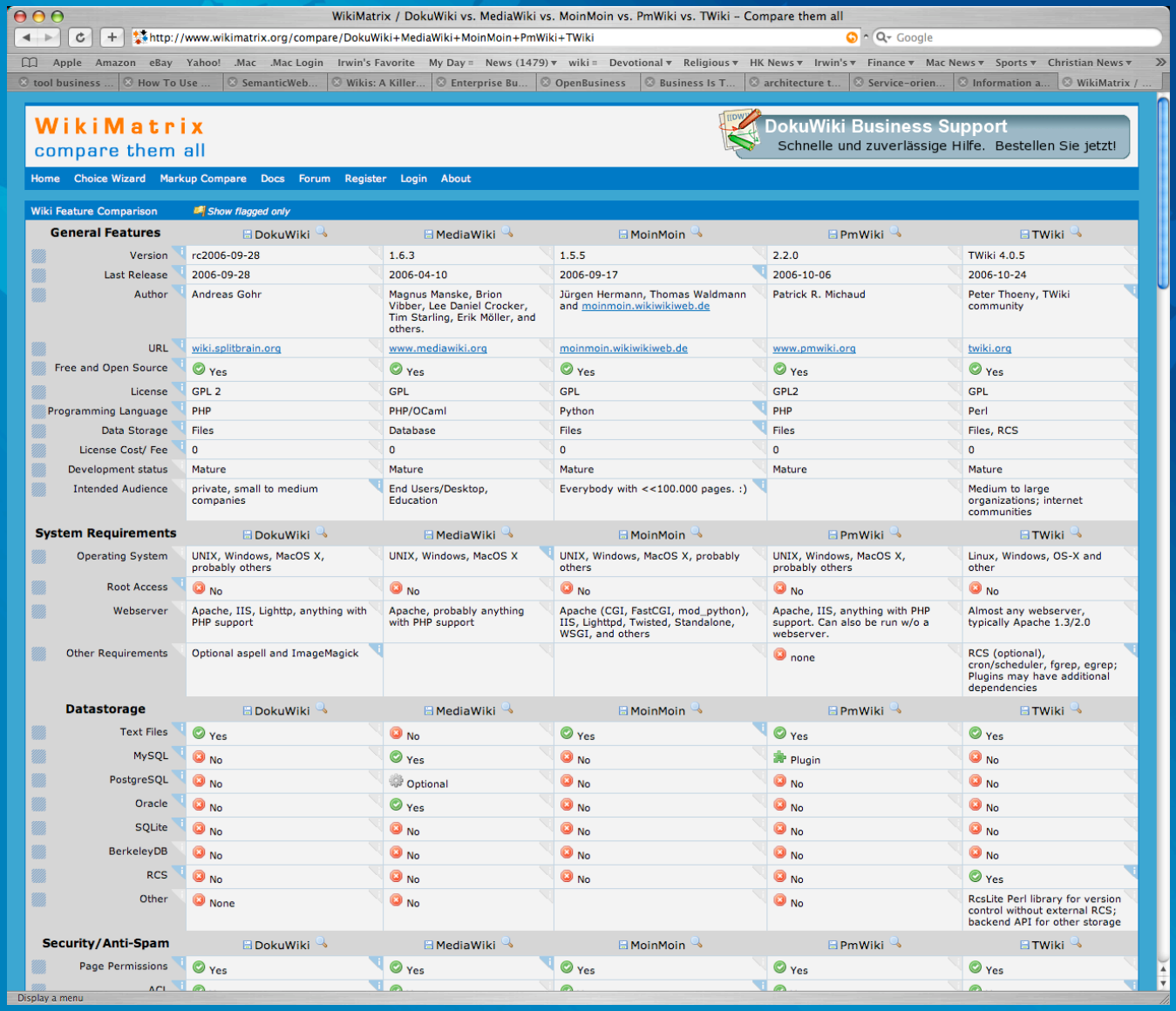
What Is A Wiki?

- 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>underlined</u>	__underline__
Monospace Format	''monospace''	<tt>monospace</tt>	`monospaced`
Strikethrough Format	~~strikethrough~~	<s>strikethrough</s>	--(strikethrough)--
Superscript Format	^{superscript}	^{superscript}	^superscript^
Subscript Format	_{subscript}	_{subscript}	,,subscript,,
Images	{{local.jpg}} {{http://foo.bar/baz.jpg}}	[[Image:wiki.png]]	http://foo.bar/foo.jpg or attachment:foo.jpg
Aligning Text	N/A	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`
`* two`
`* three`
	Bullet list

`# one`
`# two`
`# three`
	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

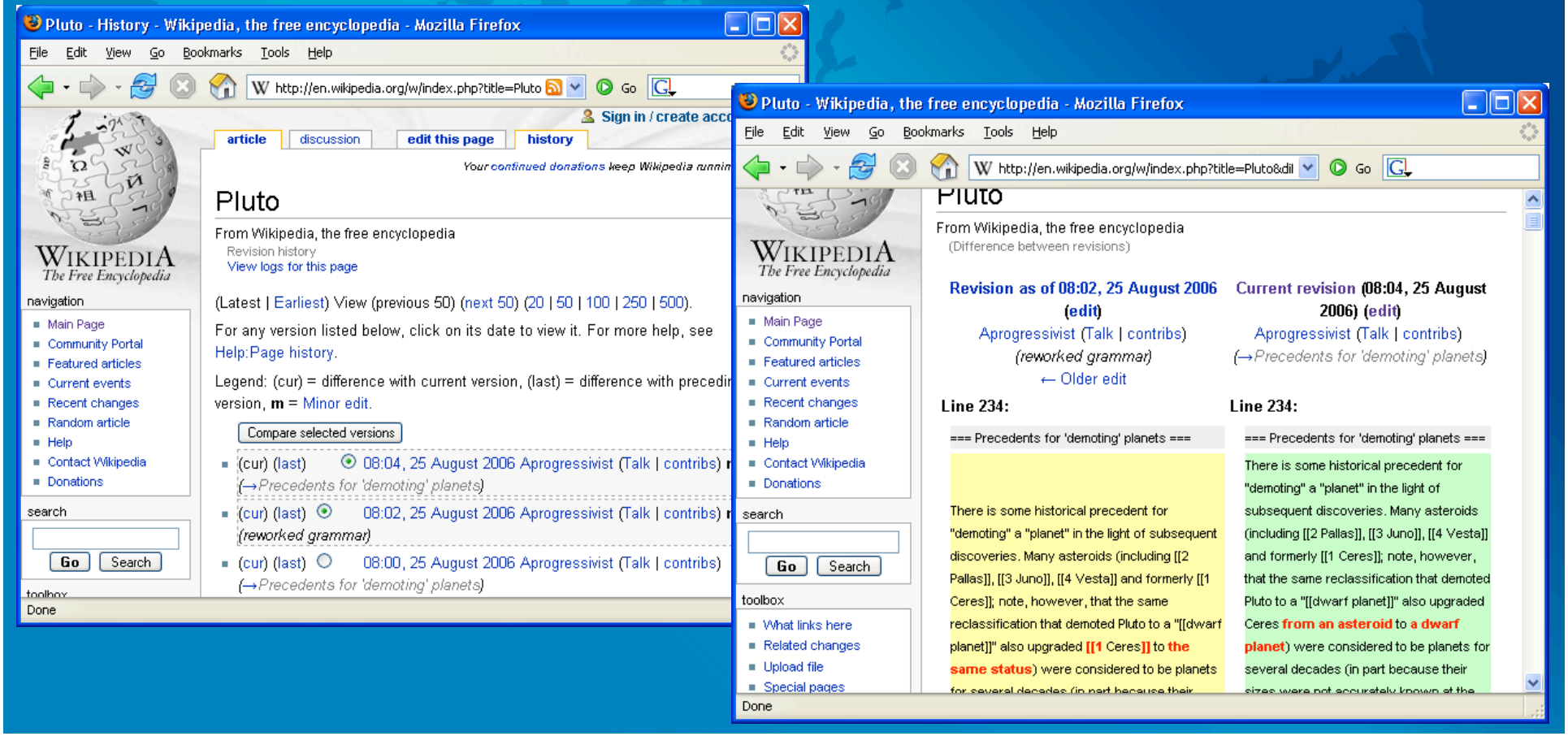
`[[Media:File.ogg]]`	Download link
`{{Name}}`	Include template "Name"
`--~~~~`	Signature (Link to userpage)
`--~~~~~`	Signature with timestamp
`#REDIRECT [[Other article]]`	Redirect to another article

Strength of Wiki Engines

- 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

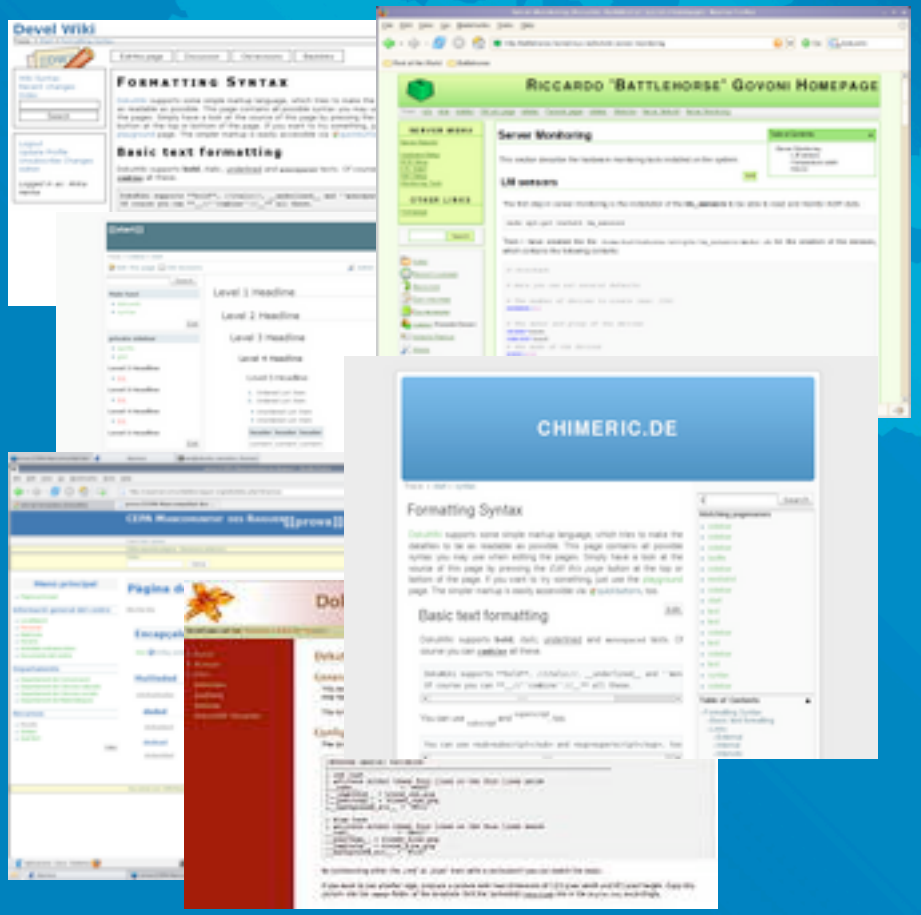
Strength of Wiki Engines

- Change log and differences



Strength of Wiki Engines

- Extensible using templates and plug-ins



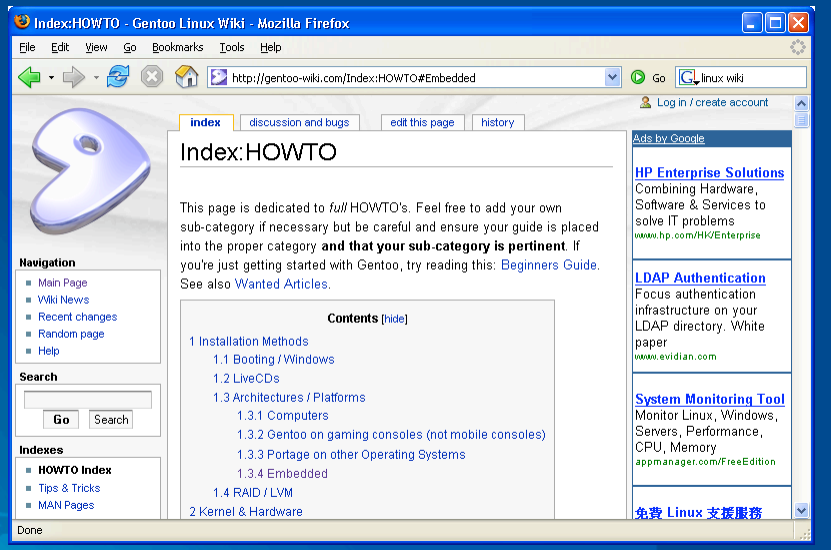
Strength of Wiki Engines

- 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

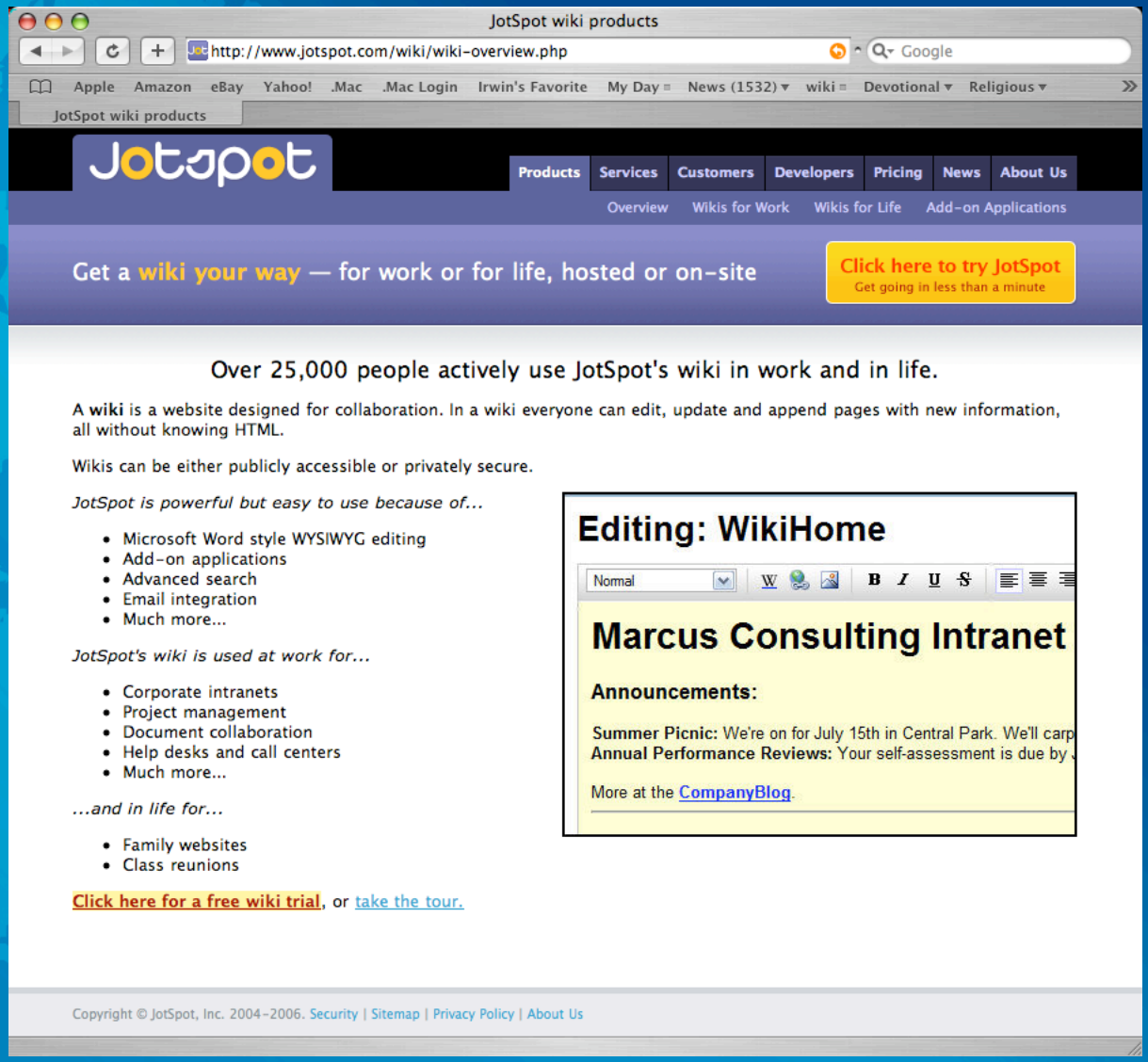


- Documentation and Collaboration
  - Distributed working style
  - Knowledge management and sharing
  - Timely updating
  - Revision control
  - Example: Gentoo Linux Wiki

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


JotSpot wiki products
http://www.jotspot.com/wiki/wiki-overview.php
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Overview Wikis for Work Wikis for Life Add-on Applications
Get a wiki your way — for work or for life, hosted or on-site
Click here to try JotSpot
Get going in less than a minute
Over 25,000 people actively use JotSpot's wiki in work and in life.
A wiki is a website designed for collaboration. In a wiki everyone can edit, update and append pages with new information, all without knowing HTML.
Wikis can be either publicly accessible or privately secure.
JotSpot is powerful but easy to use because of...
Microsoft Word style WYSIWYG editing
Add-on applications
Advanced search
Email integration
Much more...
JotSpot's wiki is used at work for...
Corporate intranets
Project management
Document collaboration
Help desks and call centers
Much more...
...and in life for...
Family websites
Class reunions
Click here for a free wiki trial, or take the tour.
Editing: WikiHome
Normal
Marcus Consulting Intranet
Announcements:
Summer Picnic: We're on for July 15th in Central Park. We'll carp
Annual Performance Reviews: Your self-assessment is due by
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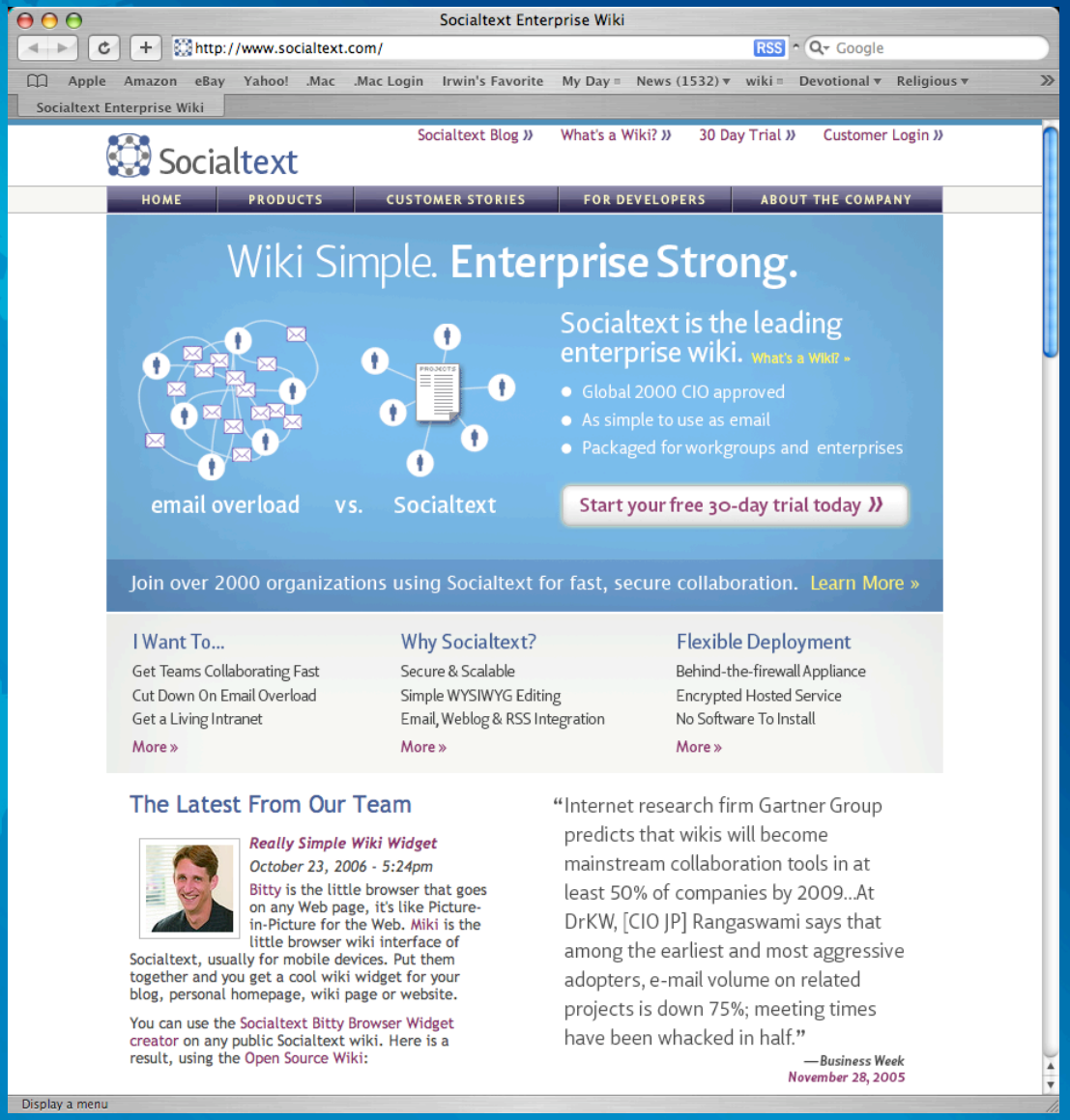
Socialtext


Socialtext Enterprise Wiki
http://www.socialtext.com/
Socialtext
Socialtext Blog »
What's a Wiki? »
30 Day Trial »
Customer Login »
HOME
PRODUCTS
CUSTOMER STORIES
FOR DEVELOPERS
ABOUT THE COMPANY
Wiki Simple. Enterprise Strong.
email overload
vs.
Socialtext
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As simple to use as email
Packaged for workgroups and enterprises
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More »
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Secure & Scalable
Simple WYSIWYG Editing
Email, Weblog & RSS Integration
More »
Flexible Deployment
Behind-the-firewall Appliance
Encrypted Hosted Service
No Software To Install
More »
The Latest From Our Team
Really Simple Wiki Widget
October 23, 2006 - 5:24pm
Bitty is the little browser that goes on any Web page, it's like Picture-in-Picture for the Web. Miki is the little browser wiki interface of Socialtext, usually for mobile devices. Put them together and you get a cool wiki widget for your blog, personal homepage, wiki page or website.
You can use the Socialtext Bitty Browser Widget creator on any public Socialtext wiki. Here is a result, using the Open Source Wiki:
"Internet research firm Gartner Group predicts that wikis will become mainstream collaboration tools in at least 50% of companies by 2009...At DrKW, [CIO JP] Rangaswami says that among the earliest and most aggressive adopters, e-mail volume on related projects is down 75%; meeting times have been whacked in half."
—Business Week
November 28, 2005
Display a menu

Confluence

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.

Pages
Easy to create, easy to edit, easy to organise.

Spaces
Because your organisation is too big for just one wiki.

News
Timely information - notices, bulletins, blogs.

Mail
Archive and index team email conversation.

Attachments
Attach, track and search your files.

Comments
Turn any page into a team discussion forum.

Organisation
Cross reference, index, search, hierarchify!

Search
Everything is searchable. Everything.

Images
Because a picture is worth a thousand words.

Links
Links should never, ever break. Ours won't.

Administration
Powerful, simple admin. No geniuses required.

Security
Enterprise grade permissioning and control.

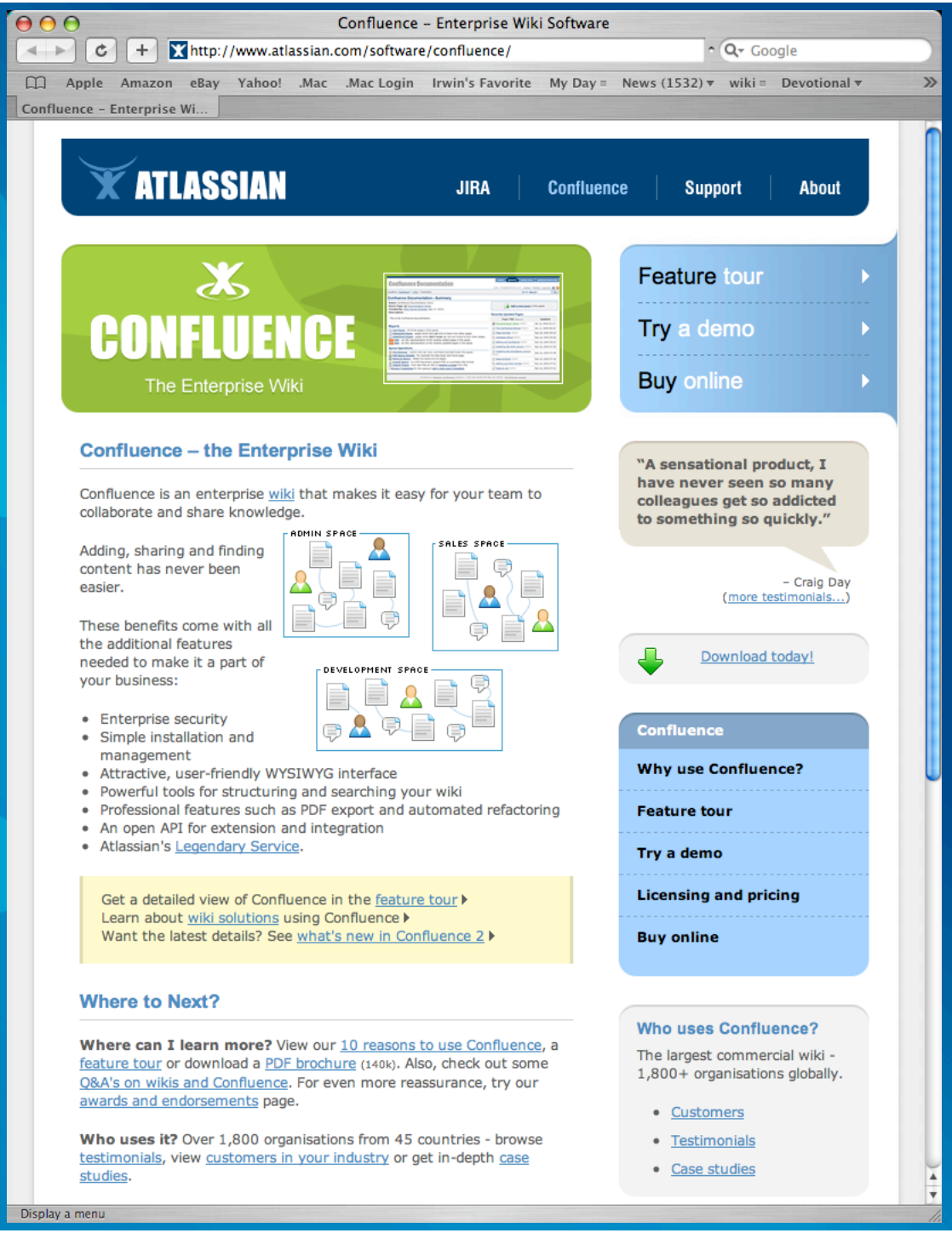
Openness
Confluence plays well with others.

Integration
From daily workflow tools to enterprise systems.

RSS
Produce and consume RSS newsfeeds.

Plugins
Just a wiki? No, an application platform.

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



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

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