The WebLion Project:
Bringing Open Source to Educational Institutions

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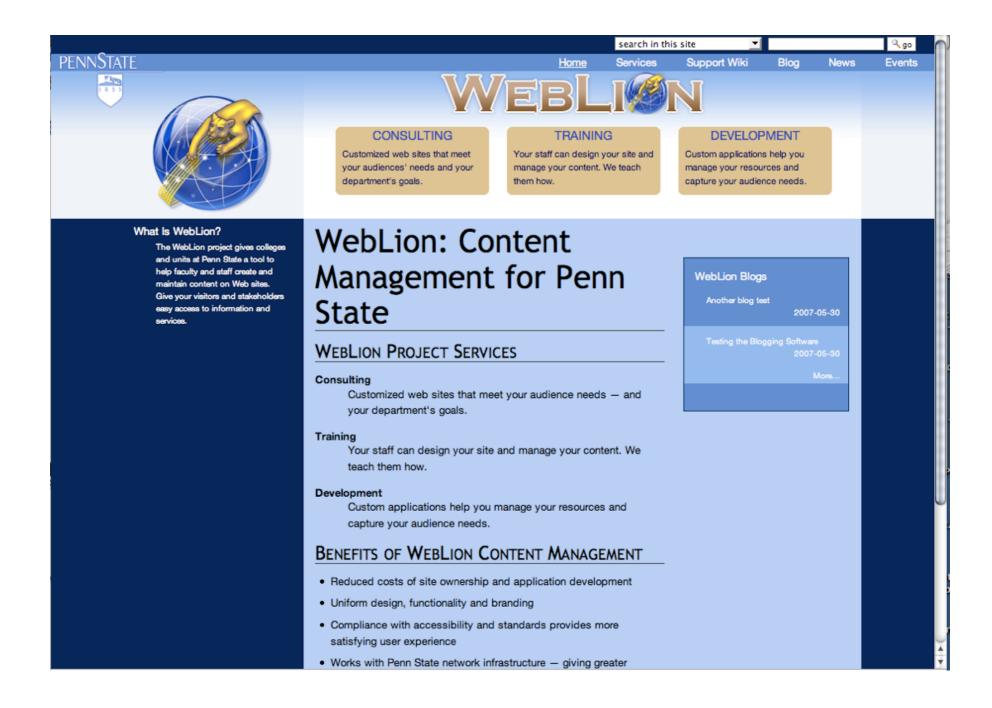**ITS TLT Special Projects Group**

Open Source in Education

- Is open source ready for higher education?

- Is higher education ready for open source?

- Strategies for organizational change
  - Collaboration Infrastructure
  - Culture: virtual organizations
  - Staff and HR: career development
- Business Metrics: ROI, interoperability, standards, accessibility, flexibility, quality

Case Study: WebLion Project

Open Source in Higher Education

- Financials and purchasing - Kuali
- Course management - Sakai and Moodle
- Digital repositories - DSpace and Fedora
- Security - Kerberos, Shibboleth
- Web portal - uPortal
- Programming languages - Python, Java, PHP
- WebLion - Zope and Plone

Characteristics of OS Projects

- Distributed virtual communities
  - Self-organizing towards a common goal

- Shared resources
  - Built on collaboration
  - Quality, roadmap controlled by meritocracy
  - Code repositories, wiki documentation, tests

- Agile principles
  - People and communities: motivate and delegate
  - Evolution: release early and often

The Open Question:

Is open source ready for higher education?

Is higher education ready for open source?

The WebLion Project

Introducing the WebLion Project

- Open source content management system (CMS)
  - Zope application framework and Plone CMS
  - Customized for Penn State Web environment

- Virtual community around Zope framework
  - Open source methods of software development
  - Infrastructure for collaboration
  - Culture supporting community development

- Self-supporting business model
  - Fee-based consulting, training and services

WebLion Team Services

- Consulting
  - Usability and information architecture
  - Accessibility
  - Content types
  - Workflow
  - Planning and timeline
  - Project management
  - Community development

WebLion Team Services

- Training
  - Pair programming
  - Immersive training
  - User groups, small groups

- Application development
  - Work with college/department staff
  - Core team leads high priority projects
  - Avoid contract work

The WebLion Community

- Developers/Designers/Users
  - Core team, partner IT staff, Zope Users Group, developers, designers, content providers

- Stakeholders
  - Sysadmins, marketing representatives, financial officers, research faculty, unit administrators

- Loners
  - Anonymous users who download and, possibly, customize the product for their needs

Bringing OS to Penn State

- Buy-in from developers and designers

- Buy-in from the stakeholders and administrators

- Strategies for organizational change
  - Collaboration Infrastructure
  - Culture: virtual organizations
  - Staff and HR: career development

- Business Metrics: ROI, interoperability, standards, accessibility, flexibility, quality

The WebLion Community

- ## Developers & designers are the key resource
  - Organized by agile principles
  - Decision makers

- ## Stakeholders
  - Identify champions
  - Memoranda of Understanding

Avochelm
azazel
b52Centos
bartc
bauer_
beny_
BobR_afk
chaoflow
chii
chris2fr
chrisinboro
CIA-6
cjj
cjohansen
cm_patric
cmcarlson
comptekki
cortelco
d-bug
d0rt
dabu
dafinga
dan__t
daniele
dayne
dc0e_
derek_richardson

Our Current Partners

- Smeal College of Business
- College of Education
- College of Information Sciences and Technology
- Innovation Park *New!*
- College of Science, Office of the Dean
- College of Communication *New!*
- Population Research Institute
- Department of Chemistry
- Department of English *New!*
- The Huck Institutes of the Life Sciences *New!*
- Ag - Dairy & Animal Science
- Ag - Horticulture *New!*
- Department of Meteorology *New!*

WebLion is Growing

Growth of the WebLion developer and designer community

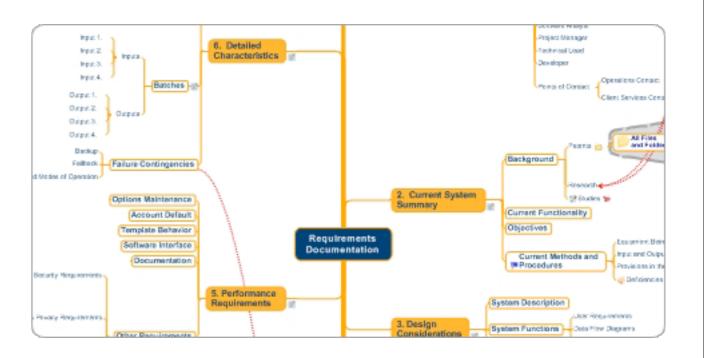| Date	Community size
April 2005	2
April 2006	23
January 2007	55
June 2007	70
October 2007	85

Collaborative Infrastructure

- Workspaces

- Subversion code repository

- Trac wiki

- IRC chat: irc.freenode.net #weblion

- Pair programming, sprints

- IM, POTS, email

darci|zzz
davconvent
fschulze
geoffd
jensens
lurker
MJ
nouri
ree
rocky|away
runyaga
SteveA
Theuni
whit
wiggy
aclark
AleX
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aaronvanderlip
abztrakt
adamowitz
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aptiko
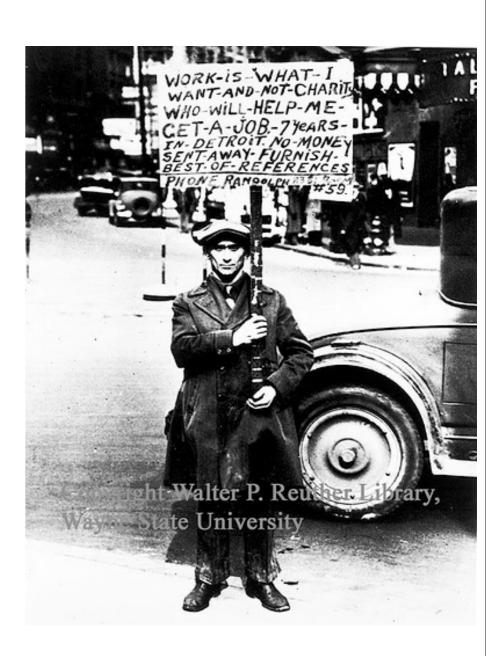Avochelm

Agile Culture

- Project decisions are iterative!

- Developers, designers and stakeholders

- Release working software early and often

- Agile teams have a life cycle, too

Professional Development

- Community of professionals
  - Professional development
  - Common platform, common skills
  - Mobility for developers, designers, etc.
  - Specialization and roles

The Future: Institutional Collaboration

- Open source and agile methods
- Roadmap of products & content types
- Shared infrastructure
- Plone guidelines for coding, testing, packaging
- Innovation: remote pair programming and sprints
- Charter/manifesto, IP agreements

Building the Education Community

- Project planning and prioritization
  - 1st meeting tomorrow, November 9

- WebLion project infrastructure
  - Subversion code repository
  - Meet colleagues at irc.freenode.net#weblion

- Communicate
  - Discuss through educational@lists.plone.org
  - Read the archives at nabble.com

More Information

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Thanks To Everyone!

WEBLION

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bpanulla
DHX
jdeluca
JohnYoo
mgruber
SnarfBot

darci|zzz
davconvent
fschulze
geoffd
jensens
lurker
MJ
nouri
ree
rocky|away
runyaga
SteveA
Theuni
whit
wiggy
aclark
AleX
_sd_
_snd
aaronvande
abztrakt
adamowitz
addihetja
ajmitch
aptiko
Avochelm
azazel

b52Centos
bartc
bauer_
beny_
BobR_afk
chaoflow
chii

mikehalm joined the chat room. (10:10AM)

esteele
Ooh. Parallels 3.0.   10:13AM

bpanulla
Really!   10:14AM

Dang... they're charging   10:15AM
for it?

esteele
Looks worthwhile though.   10:15AM

ErikRose
What's new?   10:15AM

esteele
http://www.parallels.com/e   10:16AM
n/products/desktop/

Shared networking, plays   10:16AM
nice with BootCamp.

Drag and drop between   10:16AM
desktops.

derek|home_
DHX
DigitalD
dimebar
disguy__
dixond
dokai
dort
drjnut
DustWolf
duthac
egoens
elro_
emanuel
ErikRose
ErKa
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esteele
eternauta
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Fetch
fishstickz
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Frogzoo
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gcw|solurity
geojeff_away
Gogo|tty
Gomez

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gvdm_other
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henroc
hpeter
Iron_Chef
jaebird
jasper
jergens
jessesnyder
jhb
jimmyb
jladage
jnbes
jnoff_
jodok
JohnnyST
jrjsmrtn
kados
kaeru
kalymero
kinder
kjell_
ktwilight_
kudzu

kunskap
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magnon
markvl
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Matonen
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Moo^^
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mrenoch
Mustap
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philiKON_
PingYeh
pjesi
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powr
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reinout
rjzaar
rnix
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rrbaker
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StereoSteve
SteveM|away
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tiazma
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tomster_
touff
ToyMan
VibroMax
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VladDrac
waldi
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Wheat
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zupo
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Discussion

WEBLION