

# The Nuxeo Way

Building a world-class ECM platform, the open source way

Stefane Fermigier | **NUXEO DEV DAY 2008**

Herzlich willkommen!

Welcome!

Välkommen!

Bine ați venit!

Degemer mad!

Bienvenue!

Welkom!

Bienvenidos!

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# A Bit of History

- Company started in 2000
- 2002-2005: Zope-based CPS project
- 2005: First Eclipse RCP based project
- 2005: Zope/Java hybrid: CPS4
- 2006-now: Full switch to Java

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# Our Original Goals

- Address the full **ECM scope**
  - Initial focus on Document Management
  - Architecture must be extensible and modular
- Enable and sustain the **Ecosystem**
  - Easy to work with, design for participation

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# Our Original Vision

- Don't reinvent the wheel
  - Leverage existing **standards**, work on new ones (ex: JCR2, CMIS)
  - Build on proven **open source librairies** and components (JBoss, Apache, Sun, Eclipse)
- Use a robust software engineering **process**
  - Make it **transparent** for our community

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# Lesson Learned

- Zope Era
  - Value of components-based architectures
  - Basics of ECM
- Eclipse
  - OSGi and extension points
- Java Era
  - Value of standards (Java EE, additional JSRs, OSGi)
  - With proper tools, you can be as productive and have better quality w/ Java 5 than w/ Python

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# Process and Tools

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# Process Goals

- Must enable the participations of third party contributors (partners, community)
- Must improve synchronisation between custom developments and open source projects
- Agile development practices (XP, TDD) already used at Nuxeo since 2001 or so
- Must complement them with simple, efficient and scalable project management practices

# Scrum



# TDD and Continuous Integration

 **Build History of Hudson**

Build	Date ↑	Status	
<a href="#">Nuxeo RCP - update site (nightlybuild) #185</a>	12 min	?	
<a href="#">Nuxeo Distribution #278</a>	16 hr	broken since #276	
<a href="#">org.nuxeo.ecm.platform:nuxeo-platform-documentlink-tests #212</a>	16 hr	stable	
<a href="#">org.nuxeo.ecm.platform:nuxeo-platform-documentlink-tests #234</a>	16 hr	stable	
<a href="#">org.nuxeo.ecm.platform:nuxeo-platform-userworkspace-facade #183</a>	16 hr	stable	
<a href="#">org.nuxeo.ecm.platform:nuxeo-platform-metadataext-facade #211</a>	16 hr	stable	
<a href="#">org.nuxeo.ecm.platform:nuxeo-platform-imaging-web #224</a>	16 hr	stable	
<a href="#">org.nuxeo.ecm.platform:nuxeo-platform-imaging-transform #224</a>	16 hr	stable	
<a href="#">org.nuxeo.ecm.platform:nuxeo-platform-documentlink-core #212</a>	16 hr	stable	
<a href="#">org.nuxeo.ecm.platform:nuxeo-platform-userworkspace-facade #211</a>	16 hr	stable	

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# Tools

- Mercurial
  - Distributed SCM rules!
- Maven
  - Dependency mngt, build, packaging, releasing
- Hudson
  - Continuous integration
- Jira
  - Bug / task tracking, Scrum iteration backlogs



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# More Tools

- IDEs
  - Eclipse mostly, should also support NetBeans and IDEA
- Testing
  - JUnit, Selenium
- Static code analysis
  - FindBugs, IDEA inspections, Checkstyle, Energy
- Various profilers and debuggers
  - JXInsight, YourKit

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# Where do we go from here?

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# Driving Forces

- Market needs
  - Enterprise 2.0 collaboration, move to the cloud, etc.
- Developers feedback
  - First developer survey
- R&D
  - Several starting projects

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# First Developer Survey

- From 12 Nov. to 29 Nov. 2008
- 73 answers from the Community
  - Mostly technical people
  - Thanks to everyone who took some time to answer the poll!
- Overall satisfaction: 3.8 / 5 :)

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# Strongest Points

- Ease of installation: **4.3** / 5
- Breadth of functionality: **4.3** / 5
- Standards support: **4.2** / 5

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# Areas of Improvement

- Usability of default interface: **3.2** / 5
- Documentation: **3.1** / 5

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# Most Important Use Cases for You

- Document management: 100%
- Search: 100%
- Records management: 95%
- Collaboration: 87%
- Workflow: 83%

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# What We've Done Best

- Choice of technologies: **4.3** / 5
- Conceptual model: **4.1** / 5
- Architecture (plugins, ext. points): **3.9** / 5
- API: **3.5** / 5

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# Needs More Work

- Ease and speed of development: **2.9** / 5
- Tools support: **2.9** / 5
- Developer documentation: **2.9** / 5

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# Your Preferred Deployment Platform

- Open source Java EE app servers:
  - JBoss: 81%
  - GlassFish: 64%
- Lightweight web containers:
  - Jetty: 45%
  - Tomcat (alone): 40%
- Proprietary app servers:
  - Oracle, WebSphere, WebLo: ~10%

# Your Preferred Database

- PostgreSQL: 83%
- MySQL: 56%
- Oracle: 37%
- MS-SQL: 15%

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# (Cooperative) R&D Projects

- SCRIBO (System@tic competitiveness cluster)
  - Semantic annotations, ontologies
- Nuxeo 2010 (Eureka), w/ Yerbabuena
  - Infrastructure work: Runtime and Core improvements
  - Storage, synchronisation, mobility, semantic tech...
- IKS (European Project, FP7)
  - Semantic technologies applied to CMS providers

**It's your turn to get involved!**

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# How You Can Help

- Test, file bug reports or RFEs
- Comment on proposed new API or API refactorings
- Write or improve pieces of documentation (FAQ, howtos, Nuxeo Books...)
  - Use our Wiki for easier collaboration
- Write or improve translation files
  - Already: EN, FR, DE, IT, ES, VN, CN

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# How You Can Help (contd.)

- Become a committer
  - First, submit your patches to the Jira
  - You must adhere to the projects coding rules and quality standards
  - We will give you direct access after a while
- You're also free to develop your own extensions
  - We can host them if you want
  - Including putting them under CI, etc.

# Thank you!

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