Lepido

Lepido
Tools for Apache Cocoon

Creation Review
May 13th, 2005

Sylvain Wallez
Anyware Technologies, Apache Software Foundation

eclipse

What is Lepido?

- A Technology project to build an Eclipse-based IDE and toolset for Apache Cocoon
  - Concentrates on Cocoon-specific features
  - In relation with other projects
    - WTP
    - LDP? (debugger)
    - GEF/GMF (graphical editors)

What is Apache Cocoon?

Lepido

- A web application development framework
    - Uses XML pipelines to produce web pages, PDF documents, images, word files, etc. Even music!
    - Component-based development
    - Runs in J2EE application servers

- A top-level Apache project
    - Started in 1999, very active community, thousands of users, used in high traffic websites
    - Strong business community (see http://orixo.com/)

cocoon

http://cocoon.apache.org/

eclipse

The need for tools

Lepido

- Cocoon is very powerful
  - But has a steep learning curve
  - →Getting started isn't easy

- Cocoon is very declarative
  - Component assembly
  - A lot of specific XML dialects
  - →Java tools are of little use

eclipse

Lepido project goals

- Two main goals
    - Help beginners to start using Cocoon
    - Allow experienced users to be more productive

- And some side effects
    - Make Cocoon more attractive to developers
    - Ease the adoption by decision makers

Features: wizards

Lepido

- Project creation wizards
  - Create and populate the project structure
  - Basic application templates

- Application snippets, code templates
  - Augment an existing application
  - →e.g. "add a PDF publication pipeline"

eclipse

Features: editors

Lepido

- Form-oriented editors (like plugin.xml)
  - For all structured XML files (e.g. sitemap, form definitions, configurations)
  - Built with a XUL-like system for JFace forms

- Source editors
  - For semi-structured or mixed XML dialects
  - Based on WTP's SSE

eclipse

Features: debugger

Lepido

- A multi-language debugger
  - For all interpreted languages used by Cocoon: XSLT, Javascript, Sitemap, JXTemplate, etc.
  - A generic debugging kernel, and a collection of interpreter drivers.

- Possible collaboration with LDT?

eclipse

Advanced features

- **Refactoring**
  - Build a global application model connecting related files, and provide search and refactoring features

- **MDA**
  - Produce application parts from the domain model

- **Graphical editors**
  - GEF/GMF based editors for page flow

Lepido

eclipse

Milestones

Lepido

- **M1 - summer 2005: initial donation cleanup**
    - Project setup wizard
    - Form-oriented editors for the sitemap and form definition XML files
    - → Mostly useful for beginners

- **M2 - fall 2005: real developer tools**
    - Debugger infrastructure, drivers for XSLT and sitemap
    - More form-oriented editors
    - Code templates
    - Source editors for the most frequently used XML dialects
    - → Wide adoption expected

eclipse

Milestones

Lepido

- M3 - early 2006: getting serious!
    - More debugger drivers (forms, page templates)
    - Application model and refactorings
    → Likely to be version 1.0

- M4 – sometime in 2006: advanced features
    - MDA
    - Graphical editors
    - And still more

eclipse

Community

- Development: Cocoon developers with a strong Eclipse background

  - Anyware Technologies - http://www.anyware-tech.com/
  - S&N - http://www.s-und-n.de/
  - Pro-Netics - http://www.pro-netics.it/
  - AG Software - http://www.agssa.com/
  - Otego - http://www.otego.com/
  - Osmosis - http://www.osmosis.gr/
  - Ross Gardler - http://www.burrokeet.org/
  - Stefano Mazzocchi, Cocoon founder and ASF director
  - Torsten Curdt

Lepido

eclipse

Community

Lepido

- # Newsgroup
  - 74 posts between April 12 and May 3
  - Defining planned features, discussing new ones

- # Users
  - Lepido developers will be its first users :-)
  - Very positive feedback on the Cocoon lists when Lepido was announced

eclipse

After incubation: become a WTP subproject

- ## Why WTP?
  - Lepido uses a lot of WTP components
  - WTP showed interest in some Lepido components (the XUL-like system for JFace forms)
  - Cocoon uses a lot of W3C and J2EE specs which are in WTP's scope

- ## WTP's initial scope only considers standards
  - But considers possible extensions…
  - …and mentions Cocoon among them
    - → http://www.eclipse.org/webtools/project-scope.html

Questions?

- For more information, see:
  - Project proposal
    - http://www.eclipse.org/proposals/eclipse-lepido/
  - Apache Cocoon
    - http://cocoon.apache.org/

eclipse