Basic web application development with Apache Cocoon 2.1

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Are you using Cocoon?
Agenda

• What is Cocoon?
• A bit of history
• Cocoon basics
• Demo
• Why Cocoon?
• Future of Cocoon
• Q&A
What is Cocoon all about?

- Web development framework
- Java & XML
- Separation of Concerns (SoC)
- Content transformation
- Dynamic multi-channel publishing
- Inter-operability with other Java projects (Lucene, FOP, Spring, Hibernate, etc.)
History

• Cocoon 1
  – Started in Jan. 1999 by Stefano Mazzocchi
  – Simple servlet for XSL styling of XML

• Cocoon 2
  – Rewrite for performance and scalability
  – More than just XSL transformations
Connectivity

Collect data from multiple resources
- Filesystem
- SOAP webservice
- LDAP
- Databases (XML, SQL, Object)
- WebDAV
- XML feed

If that's not enough, use your current code in Cocoon from
- JSF
- JSP
Cocoon basics

- Sitemap
- Forms framework
- Flow
- Caching
Sitemap

• XML configuration file
• Request handling
• Where everything comes together
Sitemap components

• Pipelines
• Matchers
• Generators
• Transformers
• Serializers
• Readers

<map:sitemap>
  <map:components>
    <map:pipes/>
    <map:matchers/>
    <map:generators/>
    <map:transformers/>
    <map:serializers/>
    <map:readers/>
  </map:components>
</map:sitemap>
Pipelines

• Contain matchers for (requested) URI

Example
Pipeline example

<map:pipeline>
  <map:match pattern="body-**.html">
    <map:generate type="file" src="{1}.xml"/>
    <map:transform type="xslt" src="doc2html.xsl"/>
    <map:serialize type="html"/>
  </map:match>
</map:pipeline>
Cocoon Forms framework

- Create forms
- Ajax / Dojo
- Model
- Template
- Binding (bean or xml)
Go with the flow

- Continuations
- Rhino (Javascript)
- JavaFlow
Caching

• Think about how you design your web application.
• Four kinds of caching
• Apache mod_cache
Demo

• Let’s show some stuff!
Why Cocoon?

- Powerful multi-channel publishing
- Inter-operability
- Active community
  - 20+ active committers (60+ overall)
  - 5500 mails on userlist in 2006
  - Annual GetTogether (100+ people)
Future

• Cocoon 2.2
  – Dependency management (M2)
  – Spring-based framework
  – Modularity
• Cocoon 3?
Resources

- Website:  
  - http://cocoon.apache.org/

- Mailinglists:  
  - users@cocoon.apache.org  
  - dev@cocoon.apache.org

- Wiki:  
Q&A?

• Any questions?
Latest version

http://people.apache.org/~jreijn/apachecon.html

• Presentation
• Demo sources