

CS 683 Emerging Technologies
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Doc 17 More Cocoon Flow
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References

Cocoon Flow Documentation

<http://cocoon.apache.org/2.1/userdocs/flow/index.html>

More Cocoon Flow

Cocoon Flow requires Cocoon 2.1.x

All the examples in this document use Cocoon 2.1

Hello World Example

Files

- hello2/documents/hello.html
- hello2/sitemap.xmap

No additions to cocoon main sitemap are needed

As directory structure and url to sitemap match

<http://bismarck.sdsu.edu:9006/cocoon/hello2/hello.html>

hello2/documents/hello.html

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
  "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=iso-
8859-1" />
  <title>Hello</title>
</head>
<body>
Hello World
</body>
</html>
```

hello2/sitemap.xmap

```
<?xml version="1.0" encoding="UTF-8"?>
<map:sitemap xmlns:map="http://apache.org/cocoon/sitemap/1.0">

  <map:components>
    <map:generators default="file" />
    <map:transformers default="xslt"/>
    <map:serializers default="html"/>
    <map:matchers default="wildcard"/>
    <map:selectors default="browser" />
    <map:pipes default="caching"/>
  </map:components>

  <map:pipelines>
    <map:pipeline>
      <map:match pattern="hello.html">
        <map:read type="resource" mime-type="text/html"
src="documents/hello.html" />
      </map:match>
    </map:pipeline>
  </map:pipelines>
</map:sitemap>
```

Hello World With Main Sitemap Changed

- Add a new pipeline
- Add a new match to the main pipeline

<http://bismarck.sdsu.edu:9006/cocoon/goofy/hello.html>

Adding a new Pipeline

The new pipeline must be placed before the main pipeline

```
<map:pipeline>
  <map:match pattern="goofy/**">
    <map:mount uri-prefix="goofy" src="hello2/sitemap.xmap"
      check-reload="yes" reload-method="synchron"/>
  </map:match>
</map:pipeline>

<!-- main pipeline -->
<map:pipeline>
```

Add a new Match to the Main Pipeline

```
<!-- main pipeline -->
<map:pipeline>
  <map:match pattern="goofy/**">
    <map:mount uri-prefix="goofy" src="hello2/sitemap.xmap"
      check-reload="yes" reload-method="synchron"/>
  </map:match>
```

Rest of the Example will not Change Main sitemap

They will map the url to the file structure using default matching

Using Java with Velocity

Files

- javaNoXslt/documents/simpleJava.vm
- javaNoXslt/flow/main.js
- javaNoXslt/sitemap.xmap

<http://bismarck.sdsu.edu:9006/cocoon/javaNoXslt/simpleJava.html>

javaNoXslt/flow/main.js

```
function simpleJava() {
  var text = "";
  var encoded = "";
  var upperCase = "";

  while (true) {
    cocoon.sendPageAndWait( "simpleJava.vm",
      {text: text, encoded: encoded, upperCase: upperCase});
    text = cocoon.request.get("input");
    var javaString = new java.lang.String( text);
    encoded = javaString.replaceAll( "<", "&lt;");
    upperCase = encoded.toUpperCase();
  }
}
```

javaNoXslt/documents/simpleJava.vm

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
    "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=iso-
8859-1" />
  <title>Sample Java</title>
</head>
<body>
<p>No XSLT, Html is ok</p>
#set( $kont = ".kont" )
<form action="$continuation.id$kont" method="post">
<textarea name="input" rows="15" cols="35">$text
</textarea>
<input type="submit" />
</form>
<hr />
You entered: <pre>$encoded </pre>
<hr />
Text as html:$text
<hr />
Text as Uppercase: $upperCase
</body>
</html>
```

Warning: make sure that there is an space between a variable (\$encoded) and a tag (</pre>)

javaNoXslt/sitemap.xmap

This simplified sitemap works for this example

```
<?xml version="1.0" encoding="UTF-8"?>
<map:sitemap xmlns:map="http://apache.org/cocoon/sitemap/1.0">

  <map:components>
    <map:generators default="file"/>
    <map:transformers default="xslt"/>
    <map:serializers default="html"/>
    <map:matchers default="wildcard"/>
    <map:selectors default="browser" />
    <map:actions/>
    <map:pipes default="caching"/>
  </map:components>

  <map:flow language="javascript">
    <map:script src="flow/main.js"/>
  </map:flow>

  <map:pipelines>
    <map:component-configurations>
      <global-variables/>
    </map:component-configurations>

    <map:pipeline>
      <map:match pattern="*.html">
        <map:call function="{1}"/>
      </map:match>
    </map:pipeline>
  </map:pipelines>
</map:sitemap>
```

javaNoXslt/sitemap.xmap Continued

```
<map:match pattern="*.vm">  
  <map:generate type="velocity" src="documents/{1}.vm"/>  
  <map:serialize type="html"/>  
</map:match>
```

```
<map:match pattern="*.kont">  
  <map:call continuation="{1}"/>  
</map:match>
```

```
</map:pipeline>
```

```
</map:pipelines>
```

```
</map:sitemap>
```

Displaying XSLT in Pages

Files

- javaXslt/documents/simpleJava.vm
- javaXslt/flow/main.js
- javaXslt/sitemap.xmap

<http://bismarck.sdsu.edu:9006/cocoon/javaXslt/simpleJava.html>

javaXslt/flow/main.js

```
function simpleJava() {  
    var text = "";  
    var encoded = "";  
    var upperCase = "";  
  
    while (true) {  
        cocoon.sendPageAndWait( "simpleJava.vm",  
            { encoded: encoded});  
        text = cocoon.request.get("input");  
        var javaString = new java.lang.String( text);  
        encoded = javaString.replaceAll( "<", "&lt;");  
    }  
}
```

javaXslt/documents/simpleJava.vm

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
  "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=iso-
8859-1" />
  <title>Sample Java</title>
</head>
<body>
<p>XSLT is ok</p>
#set( $kont = ".kont" )
<form action="$continuation.id$kont" method="post">
<textarea name="input" rows="15" cols="35">$encoded
</textarea>
<input type="submit" />
</form>
<hr />
You entered: <pre>$encoded </pre>
<hr />
Can't display XSLT as html tags.
What would it mean if one could?

</body>
</html>
```

javaXslt/sitemap.xmap

Same as on slides 8 & 9

Sequential Login

Files

- sequentialLogin/flow/main.js
- sequentialLogin/documents/main.vm
- sequentialLogin/documents/login.vm
- sequentialLogin/sitemap.xmap (same as slide 8 & 9)

<http://bismarck.sdsu.edu:9006/cocoon/sequentialLogin/login.html>

User must login

sequentialLogin/flow/main.js

```
function login() {
  var invalidName;
  var name;

  while (true) {
    cocoon.sendPageAndWait( "login.vm",
      { name: name, notValid: invalidName});
    name = cocoon.request.get("name");
    if (name == "sam")
      break;
    invalidName = true;
  }

  var encoded = "";
  while (true) {
    cocoon.sendPageAndWait( "main.vm",
      { encoded: encoded, name: name});
    var text = cocoon.request.get("input");
    var javaString = new java.lang.String( text);
    encoded = javaString.replaceAll( "<", "&lt;");
  }
}
```

sequentialLogin/documents/login.vm

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
  "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=iso-
8859-1" />
  <title>Login</title>
</head>
<body>
<p>Enter your name</p>
#set( $kont = ".kont" )
<form action="$continuation.id$kont" method="post">
<input type="text" name="name" size="40" />
<input type="submit" />
</form>
#if ( $notValid )
  <p>Sorry but $name is not authorized to continue.</p>
#end
</body>
</html>
```

sequentialLogin/documents/main.vm

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
  "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=iso-
8859-1" />
  <title>Main Page for $name </title>
</head>
<body>
<p>Hello $name. Please enter some text.</p>
#set( $kont = ".kont")
<form action="$continuation.id$kont" method="post">
<textarea name="input" rows="15" cols="35">$encoded
</textarea>
<input type="submit" />
</form>
<hr />
<p>You entered:</p> <pre>$encoded </pre>
<hr />
</body>
</html>
```

Optional Login

Files

- login/flow/main.js
- login/documents/main.vm
- login/documents/login.vm
- login/sitemap.xmap (same as slide 8 & 9)

<http://bismarck.sdsu.edu:9006/cocoon/login/main.html>

User can login to get more functionality

login/flow/main.js

```
function main() {
  var name = "";
  while (true) {
    var action = cocoon.request.get("action");
    if (action == null)
      action = "text";
    if (action == "login")
      name = login();
    else
      displayTextPage(name);
  }
}

function displayTextPage(name ) {
  var text = cocoon.request.get("input");
  if (text == null)
    text ="cat";
  var javaString = new java.lang.String( text);
  var encoded = javaString.replaceAll( "<", "&lt;");
  cocoon.sendPageAndWait( "main.vm",
    { encoded: encoded, name: name});
}
```

login/flow/main.js Continued

```
function login() {
  var invalidName;

  while (true) {
    cocoon.sendPageAndWait( "login.vm",
      { name: name, notValid: invalidName});
    var action = cocoon.request.get("action");
    if (action == "Cancel" )
      return "";
    var name = cocoon.request.get("name");
    if (name == "sam")
      return name;
    invalidName = true;
  }
}
```

login/documents/main.vm

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
    "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=iso-
8859-1" />
  #if ($name == "")
    <title>Main Page</title>
  #else
    <title>Main Page for $name </title>
  #end

</head>
<body>
  #if ($name == "")
    <p>Please enter some text.</p>
  #else
    <p>Hello $name. Please enter some text.</p>
  #end
  #set( $kont = ".kont")
  <form action="$continuation.id$kont" method="post">
  <textarea name="input" rows="15" cols="35">$encoded
</textarea>
  <input type="hidden" name="action" value="text" />
  <input type="submit" />
</form>
```

login/documents/main.vm Continued

```
<form action="$continuation.id$kont" method="post">
<input type="submit" value="Login"/>
<input type="hidden" name="action" value="login" />
</form>
<hr />
<p>You entered:</p> <pre>$encoded </pre>
<hr />
</body>
</html>
```

login/documents/login.vm

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
    "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
<head>
  <meta http-equiv="content-type" content="text/html; charset=iso-
8859-1" />
  <title>Login</title>
</head>
<body>
<p>Enter your name</p>

#set( $kont = ".kont" )
<form action="$continuation.id$kont" method="post">
<input type="text" name="name" size="40" />
<input type="submit" />
<input type="submit" name="action" value="Cancel" />
</form>
#if( $notValid )
  <p>Sorry but $name is not authorized.</p>
#end
</body>
</html>
```