

< Cocoon Day = "2003-Nov-18" / >



The Cocoon Portal

Matthew Langham

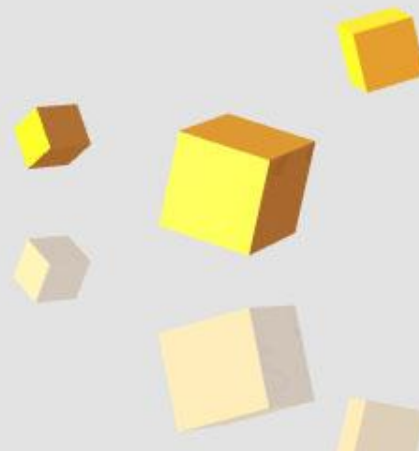
Leiter

Competence Center Open Source

S&N AG

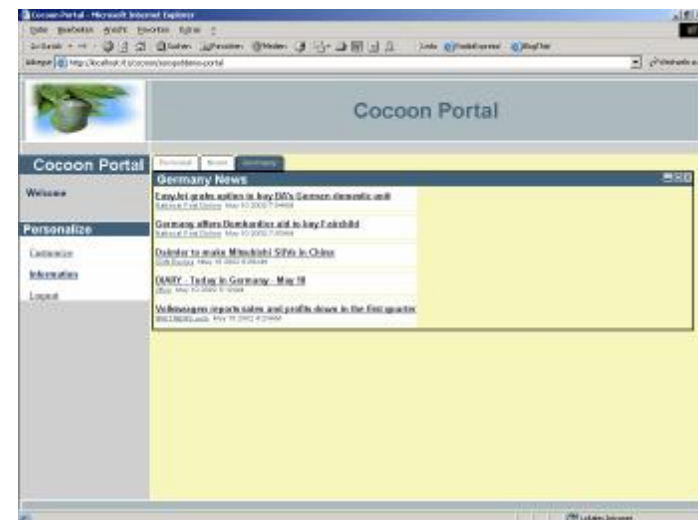
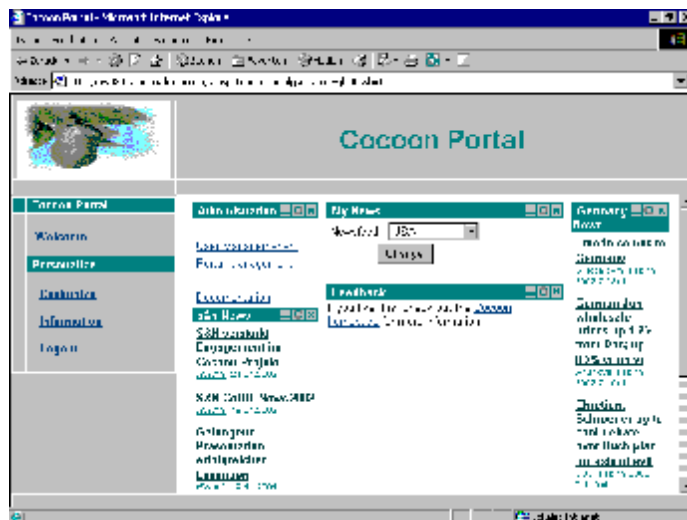
s&n

netBank solutions
netBank solutions



Agenda

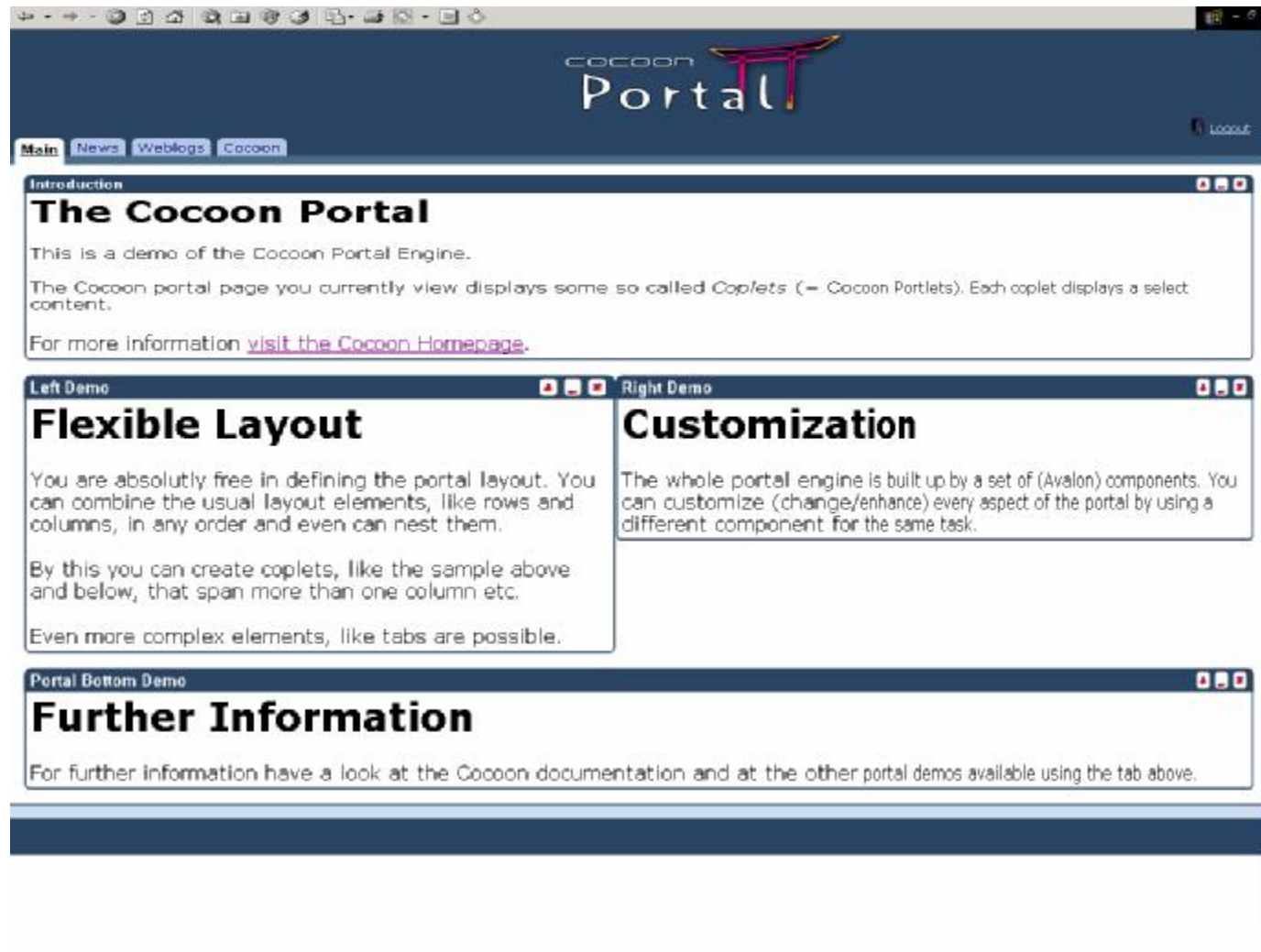
- ◆ Portal Basics
- ◆ Cocoon Introduction
- ◆ Opening the Portal
- ◆ The Future



What is a Portal?

- ◆ Web Based Application
 - ◆ Personalization
 - ◆ Individualization
 - ◆ Content Aggregation
 - ◆ Using Portlets
 - ◆ Single Sign On

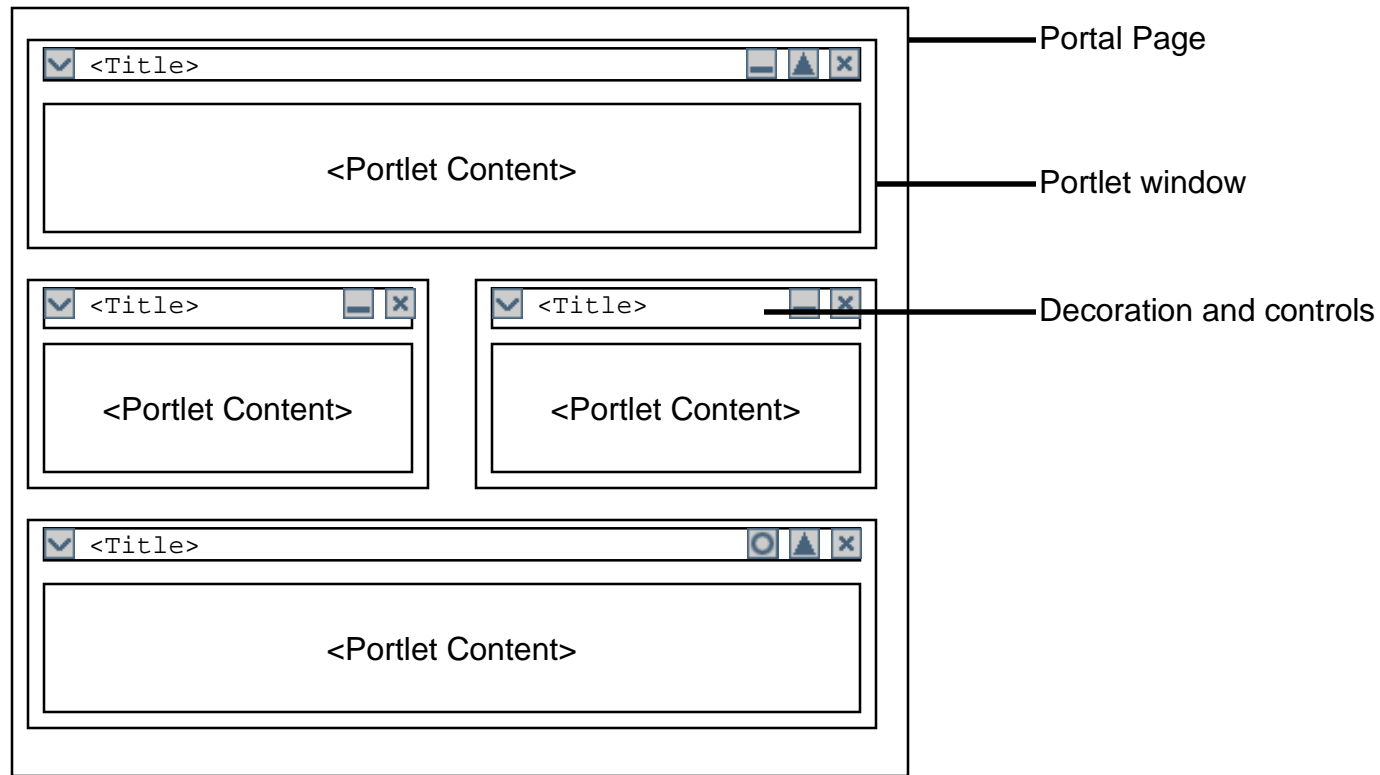
What is a Portal?



What is a Portlet?

- ◆ Web Component
 - ◆ Generates (dynamic) Content
 - ◆ News
 - ◆ Links
 - ◆ Complete Web Application
 - ◆ ...
 - ◆ Managed by a Portlet Container

A Portal Page Sample



The Cocoon Portal

Introduction



History of the Cocoon Portal

- ◆ Started in September 2000
 - ◆ Commercial product developed by S&N
 - ◆ Based on Cocoon
 - ◆ Additional components and project specific additions
 - ◆ CMS, Tools, documentation, trainings
- ◆ Completed in mid 2001
 - ◆ sunRise and sunSpot
 - ◆ Used in various projects
- ◆ Donated to the Cocoon project in February 2002
 - ◆ Used around the world
- ◆ Started new Portal Engine in the end of 2002
 - ◆ The usual advantages

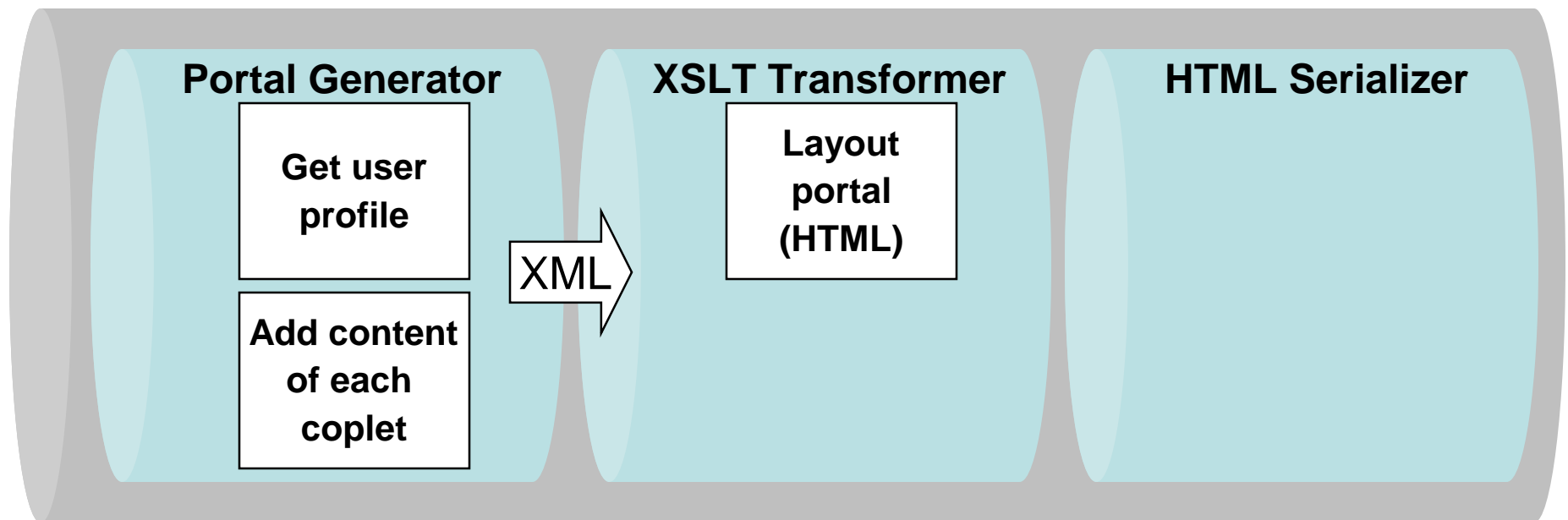
Common Requirements...

- ◆ Integration of different data sources
 - ◆ Static sources (HTML, XML, Office Documents...)
 - ◆ Dynamic sources (CMS, Archives...)
 - ◆ Databases (SQL DB, XML DB, LDAP...)
 - ◆ Complex Applications
- ◆ Single Sign-On
- ◆ Personalization
- ◆ Individualization
- ◆ Multi Channel
 - ◆ PCs (HTML, XML)
 - ◆ Mobile, Organizer (WML)
 - ◆ Documents (PDF, Office Documents)
 - ◆ Email
 - ◆ Applications

...fulfilled by Cocoon

- ◆ Advantages of the pipeline concept
 - ◆ Different Generators for retrieving data
 - ◆ Different Transformers for manipulating/augmenting data
 - ◆ Stylesheet Transformation
 - ◆ for various output formats
 - ◆ for customized pages
- ◆ Logic
 - ◆ Format Detection
 - ◆ Page Flow
 - ◆ Actions

Portal Pipeline



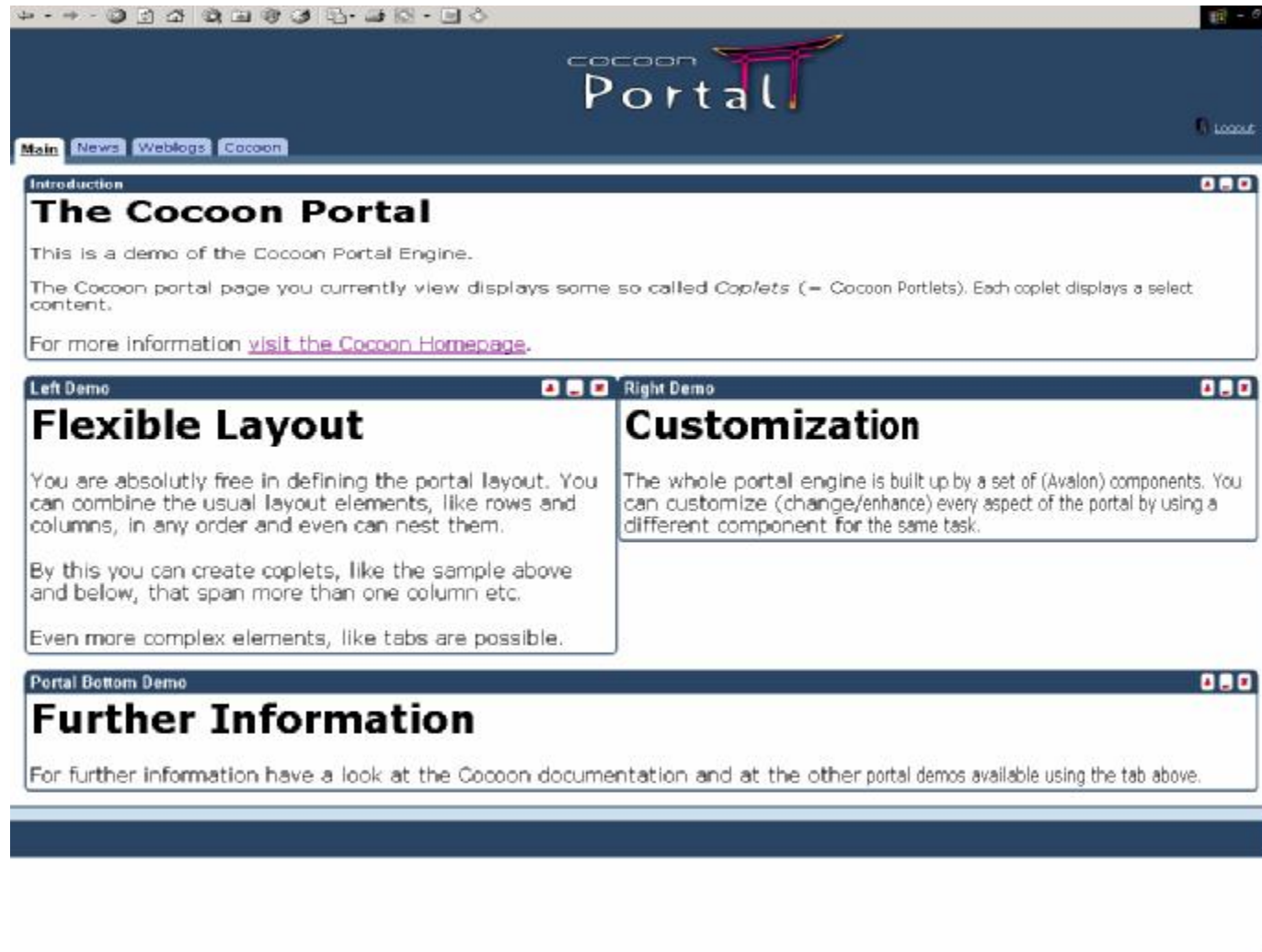
Generating the Portal View

- ◆ Getting the Profile
 - ◆ Layout
 - ◆ User preferences
- ◆ Rendering the View
 - ◆ Drawing the layout
- ◆ Aggregating Content
 - ◆ Include content of selected coplets

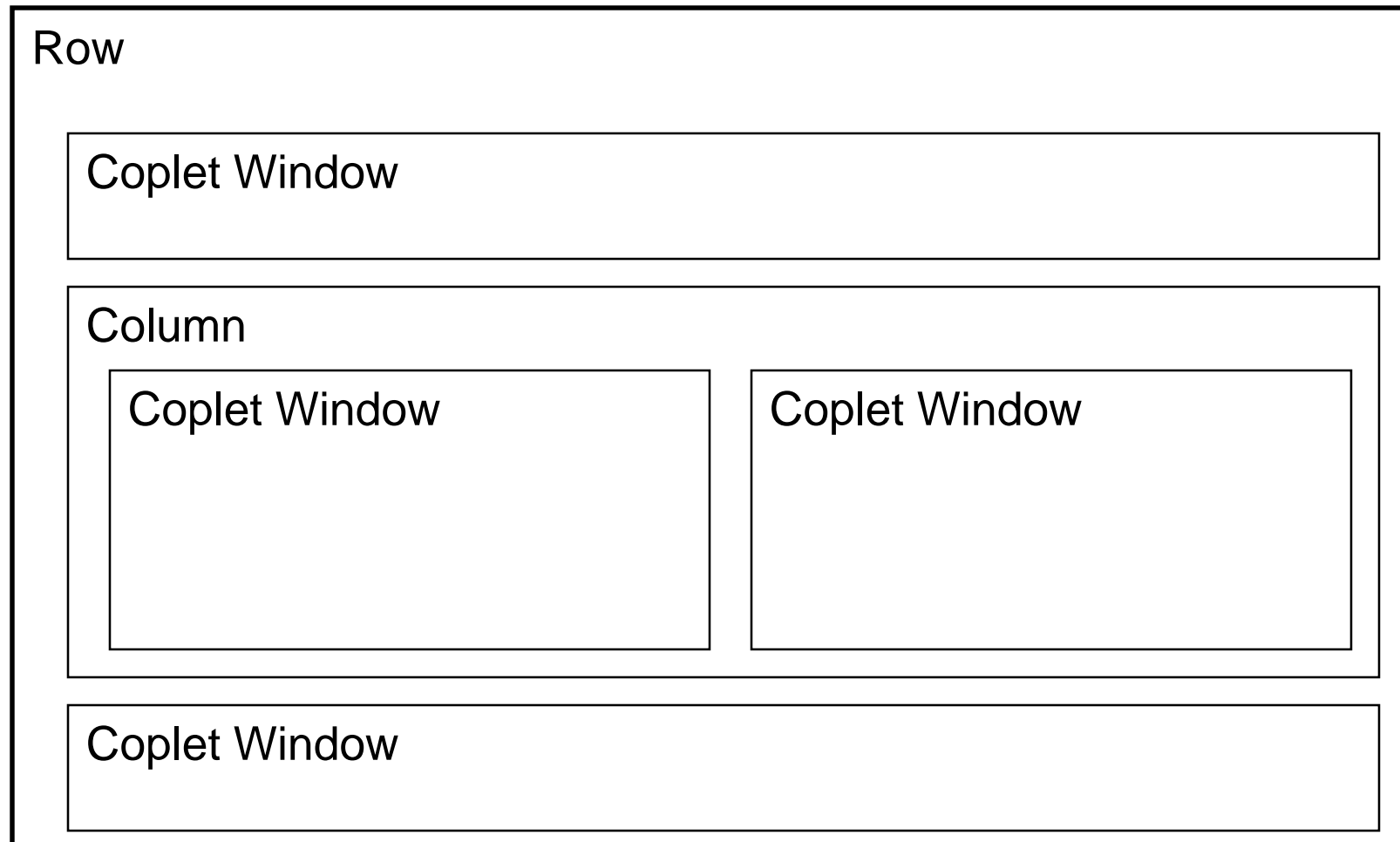
Defining The Portal Layout

- ◆ Hierarchical Tree of
 - ◆ Composite Layout Objects
 - ◆ Row, Column
 - ◆ Tab
 - ◆ ...
 - ◆ Single Layout Objects
 - ◆ Coplet Window
 - ◆ Frame
 - ◆ Link
 - ◆ ...
 - ◆ Deep nesting possible!

Defining The Portal Layout



Defining The Portal Layout



Defining The Portal Layout

```
<composite-layout name="row">
  <item>
    <coplet-layout name="coplet">
      <coplet-instance-data>First</coplet-instance-data>
    </coplet-layout>
  </item>
  <item>
    <composite-layout name="column">
      <item>
        <coplet-layout name="coplet">
          <coplet-instance-data>Left</coplet-instance-data>
        </coplet-layout>
      </item>
      <item>
        <coplet-layout name="coplet">
          <coplet-instance-data>Right</coplet-instance-data>
        </coplet-layout>
      </item>
    </composite-layout>
  </item>
  <item>
    <coplet-layout name="coplet">
      <coplet-instance-data>Bottom</coplet-instance-data>
    </coplet-layout>
  </item>
</composite-layout>
```


Rendering The Portal Layout

- ◆ Configured renderer for each layout
 - ◆ XML, HTML, WML, ...
- ◆ Renderers traverse the tree
- ◆ Placeholder for each coplet

```
<table>
  <tr><td>
    <coplet-layout name="coplet">

      <coplet-instance-data>First</coplet-instance-data>

    </coplet-layout>
  </td></tr>
  ...
</table>
```

Getting Content from Copelets

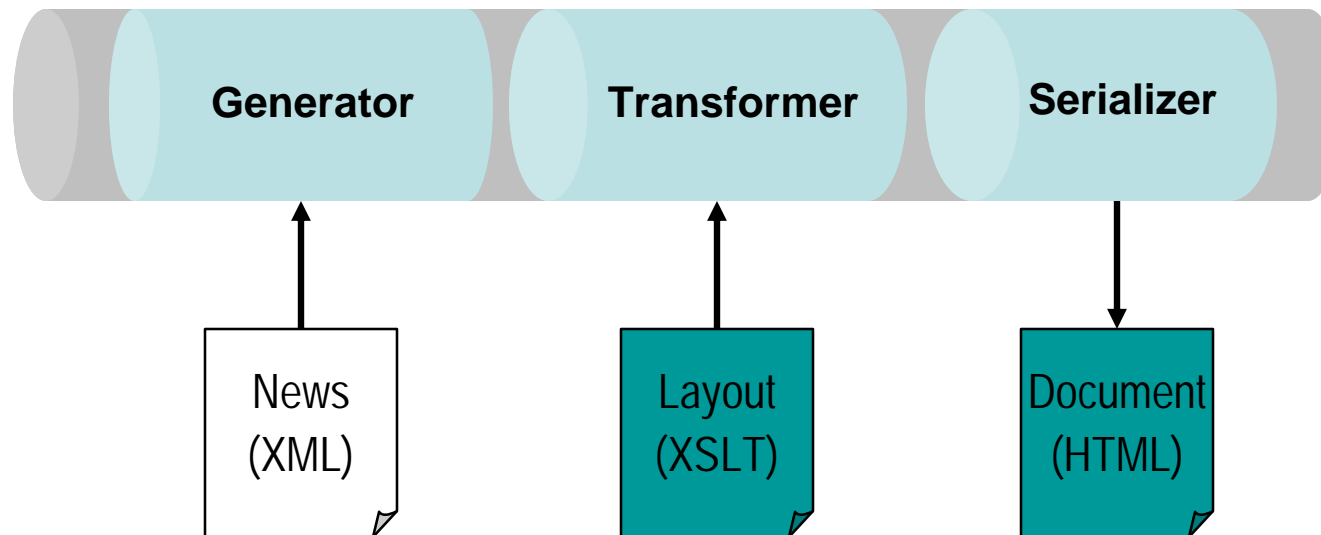
- ◆ Different types of copelets
 - ◆ Static
 - ◆ URI based
 - ◆ Pipeline based
 - ◆ JSR 168 portlets (coming real soon now **J**)
 - ◆ Custom

The screenshot shows the Cocoon Portal interface with several callout boxes pointing to specific components:

- Static Coplet XML File:** Points to the left sidebar navigation menu containing links like 'Web', 'Personal', 'Customize', 'Information', and 'Logout'.
- Role Dependent Coplet Pipeline: XML + XSLT:** Points to the 'Administration' section, which includes links for 'User Management and Portal Management' and 'Administration'.
- Dynamic RSS Coplet Pipeline: Remote XML XSLT:** Points to the 'Germany News' section, which displays a list of news items with titles and dates.
- Dynamic Portlet using JSR 168:** Points to the 'My News' section, which features a 'Newsfeed' dropdown menu and a 'Change' button.
- Static Coplet Own Java Class:** Points to the 'Banking News' section, which displays news items with titles and dates.

Coplet Sample

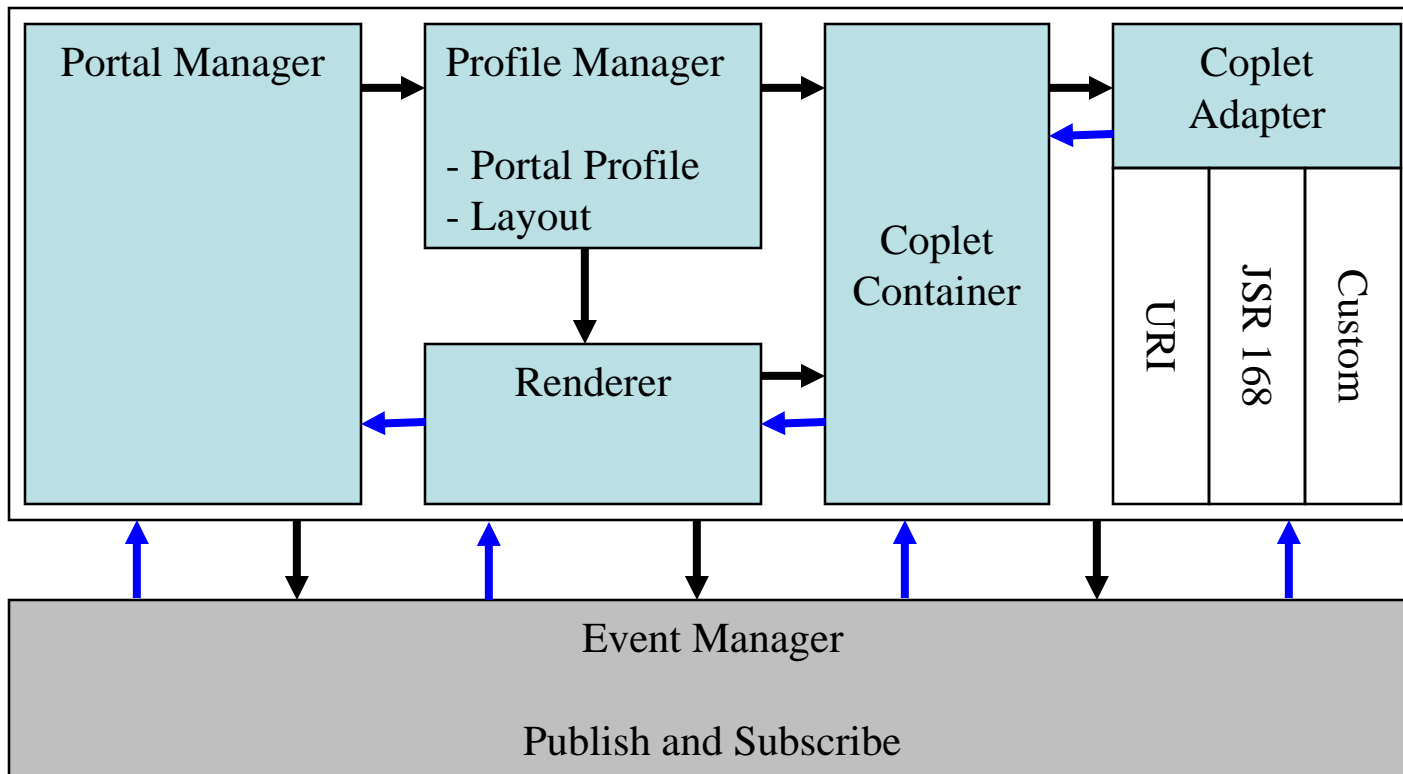
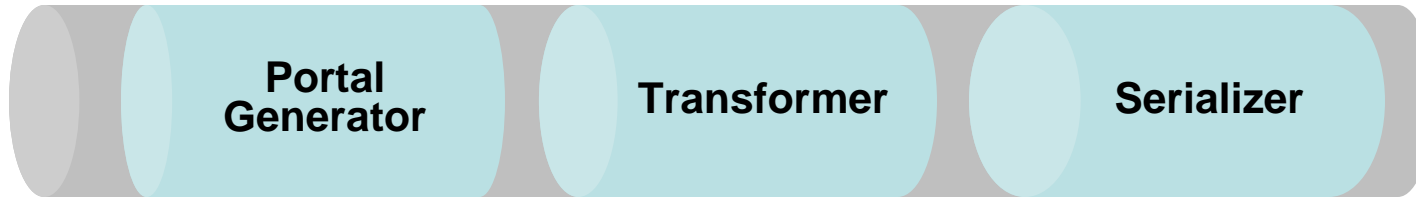
- ◆ Reads news from RSS feed
 - ◆ Example: <http://radio.weblogs.com/0107211/rss.xml>
- ◆ Transforms news to HTML
- ◆ Uses a simple Cocoon pipeline



Cocoon Portal

- ◆ Definition and configuration in XML
 - ◆ Layout (ordering) separated from content
 - ◆ Using existing types
 - ◆ Requires no Java coding
- ◆ Predefined coplet types
 - ◆ Simple usage of Cocoon for delivering content
 - ◆ Requires no Java coding

The Bigger Picture



The Bigger Picture

- ◆ The Cocoon Portal is
 - ◆ Assembled of several (Avalon) components
 - ◆ Change of behaviour through
 - ◆ Change of (XML) configuration
 - ◆ Exchanging/Extending components
 - ◆ Highly extensible
 - ◆ Pluggable

The Bigger Picture - Example

- ◆ The Profile Manager
 - ◆ Delivers the portal layout
 - ◆ Delivers the profile
 - ◆ Delivers preferences
 - ◆ Manages (persists) all of the above

The Bigger Picture - Example

- ◆ Static Profiles
 - ◆ Reads static XML files
- ◆ Profiles per User
 - ◆ Authentication Framework in Cocoon
 - ◆ Authentication of Users
 - ◆ Protection of Documents (Pipelines)
 - ◆ Flexible Integration of (existing) User Databases
 - ◆ One persistent profile for each user
 - ◆ XML documents
 - ◆ Flexible storing anywhere
 - ◆ Profile Hierarchy
 - ◆ Role based
- ◆ Your own Profile Manager

Portal Features

- ◆ Everything is configurable
 - ◆ Available coplets
 - ◆ Features of a coplet
 - ◆ Layout information
 - ◆ User rights
- ◆ Flexible Presentation
 - ◆ Stylesheets for multi-channel
 - ◆ Coplets can be channel-dependent
- ◆ Parallel Processing

The Cocoon Portal

Real World Examples



Portal Example at BASF

Elastogran

BASF Gruppe

- Home
- Standorte
- Organigramm
- Telefon, Fax, eMail
- Elastogran Internet
- BASF-Wide-Web
- BASF Polyuretane
- A bis Z
- Infomaterial
- Gästebuch
- Speisepläne
- VISION 2010

Research News

Weit hinten, hinter den Wortbergen, fern der Länder Vokalien und Konsonantien leben die Blindtexte. Abgeschlossen wohnen Sie in Buchstabhausen an der Küste des Semantik, eines großen Sprachozeans. Ein kleines Bächlein namens Duden fließt durch ihren Ort und versorgt sie mit den nötigen Regelialien. Es ist ein paradiesmatisches Land, in dem einem... [mehr ...](#)

Elastogran Latest News

Wissen über den Nachbarn auf den neuesten Stand gebracht

16 Schwestern des Diakonissen-Mutterhauses Lemförde besuchten die benachbarte Elastogran. Sie nutzten die Einladung, um ihre Kenntnisse über das Unternehmen auf den neuesten Stand zu bringen. „Es tut gut zu wissen, was in der Nachbarschaft produziert wird und wie verantwortungsvoll die Mitarbeiter des Unternehmens mit den eingesetzten Stoffen und Verfahren umgehen“ ... [mehr ...](#)

Europäische Standorte

Anfahrtskizzen und Standortinformationen sind für folgende Werke verfügbar:

Lemförde
Schwarzheide
Olching

Important Links On Web

[Link 1](#)
hier erscheint der beschreibende Text zum Link

[Link 2](#)
hier erscheint der beschreibende Text zum Link

[Link 3](#)
hier erscheint der beschreibende Text zum Link

Speisepläne

Die Kantine empfiehlt ...

[Menue 1](#)
[Menue 2](#)
[Menue 3](#)
[Wochenplan](#)


Kleinanzeigen Kiosk




Hier finden Sie alles von A wie "Auto" bis Z wie "Zugtickets". Was noch alles dazwischen liegt, finden Sie einfach und schnell.


Aktuelle Angebote: 123 Stck.

[mehr...](#)

Portal Example at BASF





mainmenu

- Standorte
- Organigramm
- Elastogran Internet
- BASF Polyuretane
- Infomaterial
- Gästebuch
- VISION 2010
- Kontakt



researchnews

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[mehr ...](#)





europaenlocations

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kleinanzelgenkiosk

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[mehr...](#)

[↑ Top](#)

Integrating Applications at RZB

The image shows two browser windows illustrating the integration of external applications into the RZB Demo Portal. The top window shows the source application, 'Raiffeisen Services Framework Dokumentation', with a table of modules and a list of basisservices. The bottom window shows the 'RZB Demo Portal' with the same content integrated into its layout. An 'aggregated menu' on the left side of the portal window lists various services, including those from the integrated application. Orange arrows point from the source application to the integrated content and the menu in the portal window.

integrated applications

aggregated menu

Module	Type	Document html	Document doc
Spezifikation	Konzept	RSF_Spezifikation.htm	RSF_Spezifikation.doc
Gesamtdokument	technical Documentation	RSFGesamtdokument.htm	RSFGesamtdokument.doc

Name	tech. Doku	xsd	wsdl	Konfig. in
Authentication Service	MS Word HTML	.xsd		
Authorisation Service	MS Word HTML	.xsd		
Caching Service	MS Word HTML	n/a		
Logging Service	MS Word HTML	n/a		
Mailing Service	MS Word HTML	.xsd		
Resource Service	MS Word HTML	.xsd .xsd (config)		
Storage Service				

Name	tech. Doku	xsd	wsdl	Konfig. in
Authentication Service	MS Word HTML	.xsd	.xsd	rsfconfig.xml
Authorisation Service	MS Word HTML	.xsd	.xsd	rsfconfig.xml
Caching Service	MS Word HTML	n/a	n/a	rsfconfig.xml bei zu cachingdem Service
Logging Service	MS Word HTML	n/a	n/a	n/a
Mailing Service	MS Word HTML	.xsd	.xsd	rsfconfig.xml
Resource Service	MS Word HTML	.xsd .xsd (config)	.xsd	rsfconfig.xml

The Cocoon Portal

- ◆ Is tried and trusted
- ◆ All Cocoon features are usable
 - ◆ Pipelines
 - ◆ Flow
 - ◆ Form handling
- ◆ Usable without Java knowledge
- ◆ Will soon extends the JSR 168
- ◆ Benefits from new concepts/features
 - ◆ In Cocoon (e.g. blocks)
 - ◆ **And** in the Portlet API

Thanks for your attention!

