

E-Logbook Reloaded



or the Renovation of DESYs Electronic Logbook

Raimund Kammering

ICALEPCS – Web technologies

Kobe Japan, October 12-16, 2009


The e-logbook talk cycles




PCaPAC 2002

<title>
**An XML based web service for
an electronic logbook**
</title>

<author>Raimund Kammering</author>
<institute>DESY MVP</institute>
<date>2002-10-16</date>
<conference>PCaPAC 2002 Frascati</conference>



1 yr




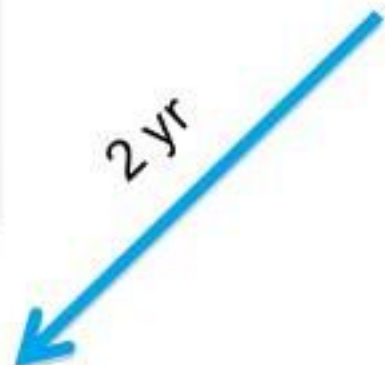
ICALEPCS 2003

Review of two years experience
with an electronic logbook

O. Henster, R. Kammering, A. Petrosyan and K. Rehlich

Deutsches Elektronen-Synchrotron

2 yr



PCaPAC 2005

The electronic Logbook
Making the next step

O. Henster, R. Kammering,
A. Petrosyan, K. Rehlich and E. Sombrowski

22 March 2005 PCaPAC 2005 Hazama, Japan R. Kammering



4 yr



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2009 ICALEPCS



E-Logbook Revolutions

or the never ending story of
DESYs Electronic Logbook

PCaPAC **2017**, Japan

Joint DESY controls group



> History

> e-logbook renovation

- Motivation
- Navigation tree
- e-logbook manager
- Coming soon
- Putting it all together

> Some facts, thoughts & conclusions

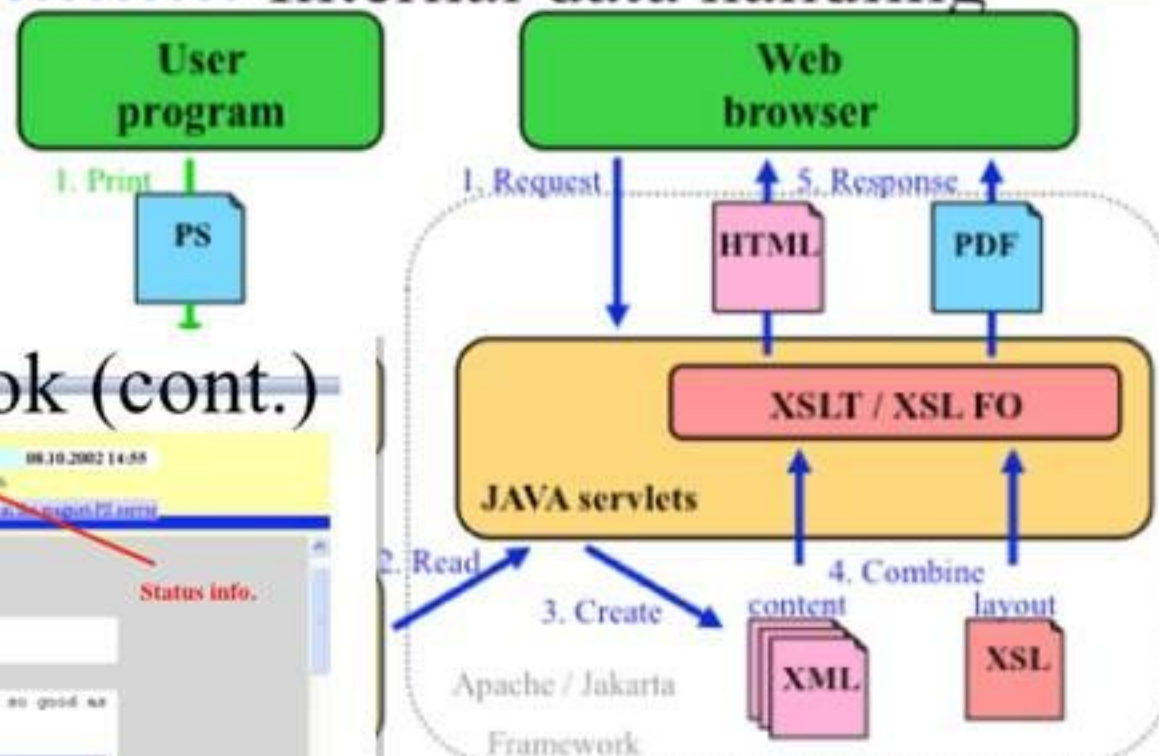
TESLA Requirements

- **Simplicity:**
Input must be self describing and easy
- **Availability:**

TESLA The TTF e-logbook (cont.)

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TESLA Internal data handling



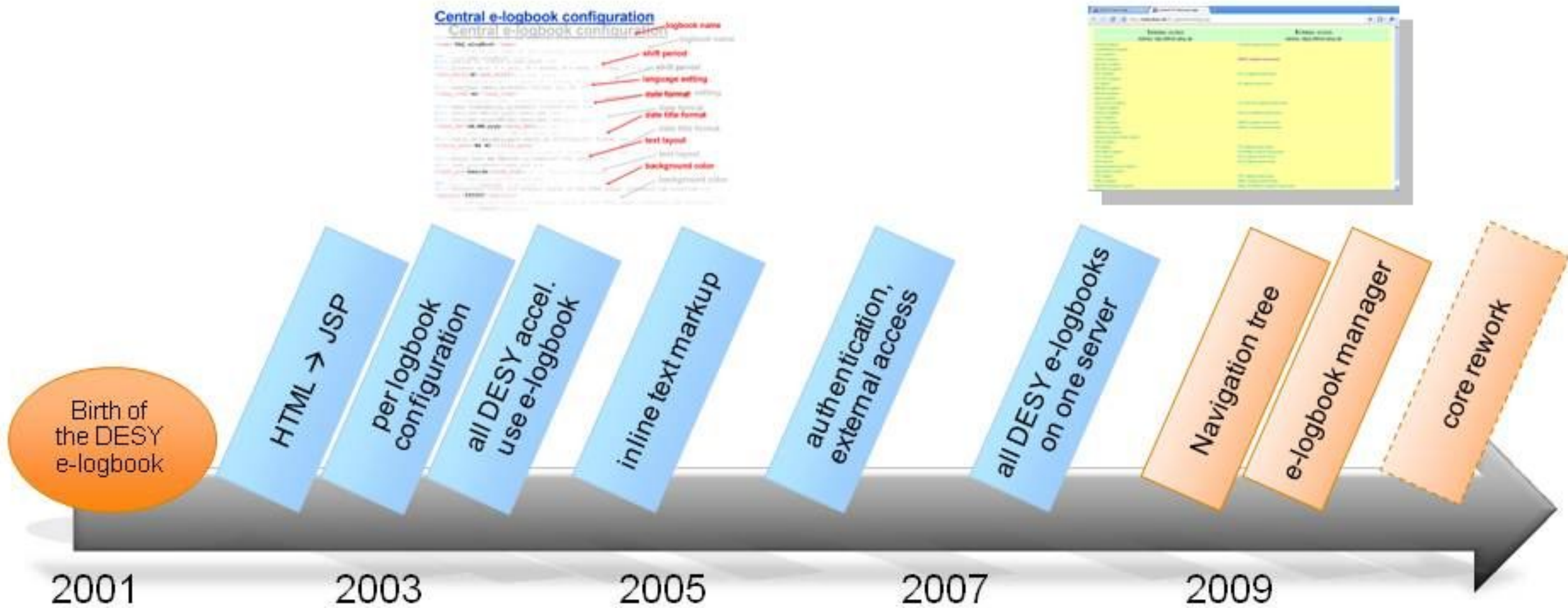
12

<author value="Raimund Kammering"/><institute value="DESY MVP"/>

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History



On **ICALPECS 2003** I gave the outlook:

DOOCS The future **TESLA**

To be done:

- Make common e-logbook parts a **Web ARchive** (*WAR* file):
Easy and fast deployment, upgrades and maintenance
- **Expand parameterization** (for configuration file):
More flexibility per e-logbook, limit number of XSL files
- Implement **security, authentication, authorization** into e-logbook *WAR*:
Enable collaborating partners to access on side info.
Allow personalization of user specific desires

15 Oct. 2003 ICALPECS 2003 Gyeongju, Korea R. Kammering

Deutsches Elektronen-Synchrotron 
in der Helmholtz-Gemeinschaft

e-logbook renovation: Navigation Tree

Replaced **Java Applet** navigation tree by a **AJAX based**



Client - JavaScript
Request

doc/ ... ?

```
<?xml version="1.0" encoding="UTF-8" ?>
<root>
  <server>
    <impl_xfel>
      <impl_ttf>
        <hardware>
          <applications>
            <api>
              <public>
                <impl_server>
                  <cv</cv>
            </api>
          </applications>
        </hardware>
      </impl_ttf>
    </impl_xfel>
  </server>
</root>
```

Server XML
Response

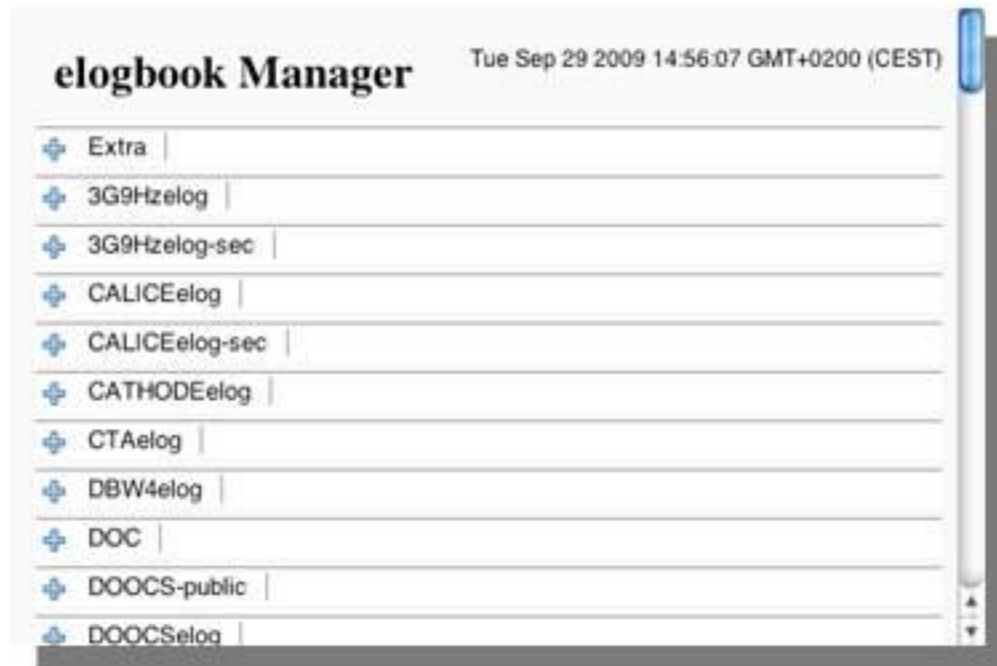


- > much better user experience
- > dynamic reload of server side changes
- > synchronization of content view and navigation tree



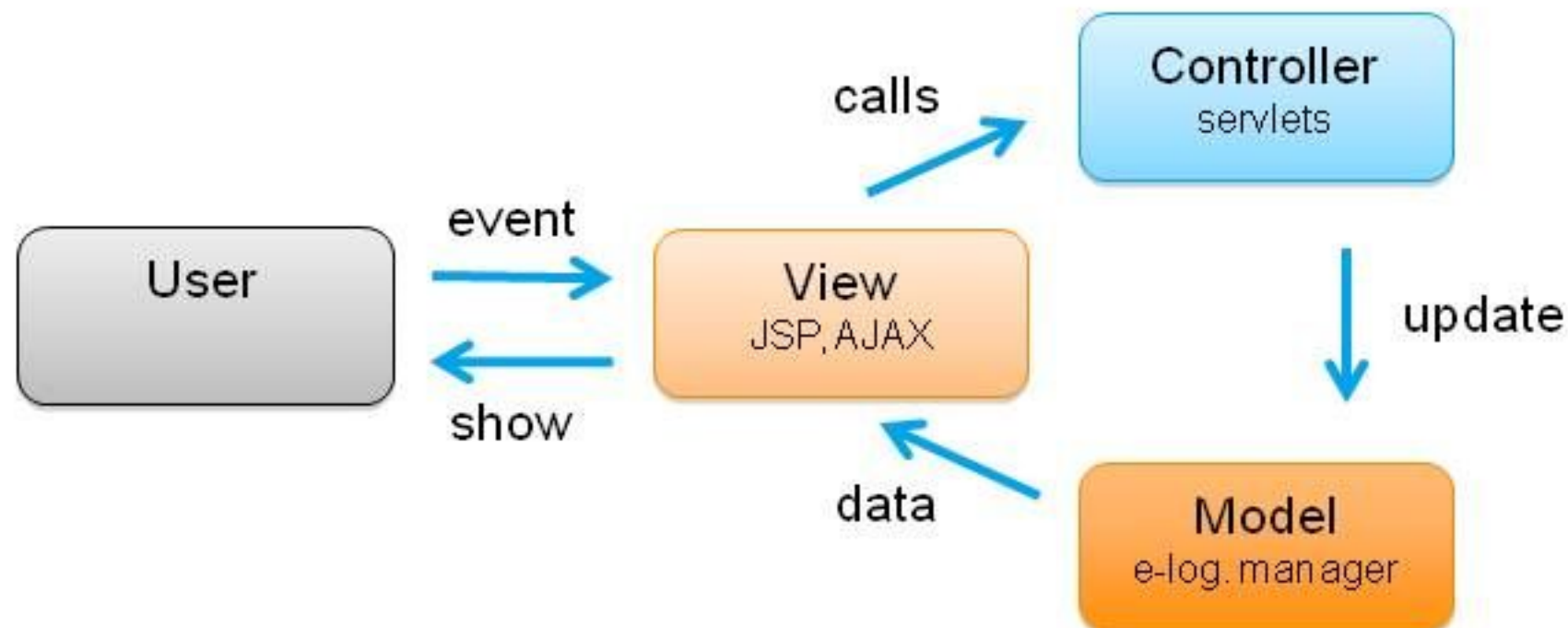
e-logbook renovation: e-logbook manager

Manage all logic in **one manager application**



- > manage navigation trees (create, serve, ...)
- > periodic job scheduler (Open source project: Quartz <http://www.opensymphony.com/quartz/>)
- > front end for e-logbook configuration

Refactoring the e-logbook core in the Model View Controller sense



- **View:** JSP, AJAX receives user input, displays data
- **Controller:** Servlets control access, update the model
- **Model:** e-logbook manager keeps state, manages configurations

This changes will enable us to:

- > **personalize** e-logbooks completely by use of the **configuration file**
 - > **create new** e-logbook **instances** with a click
 - > **install** a **new** e-logbook **server** by simply deploying the war file
 - > have **one clean entrance** to the e-logbook (needed for SSO)
- Make the e-logbook one clean, monolithic web application



Some facts, thoughts & conclusions

Requests for copies of the e-logbook are **still not ending**

more than 20 institutes requested copies



Some facts, thoughts & conclusions

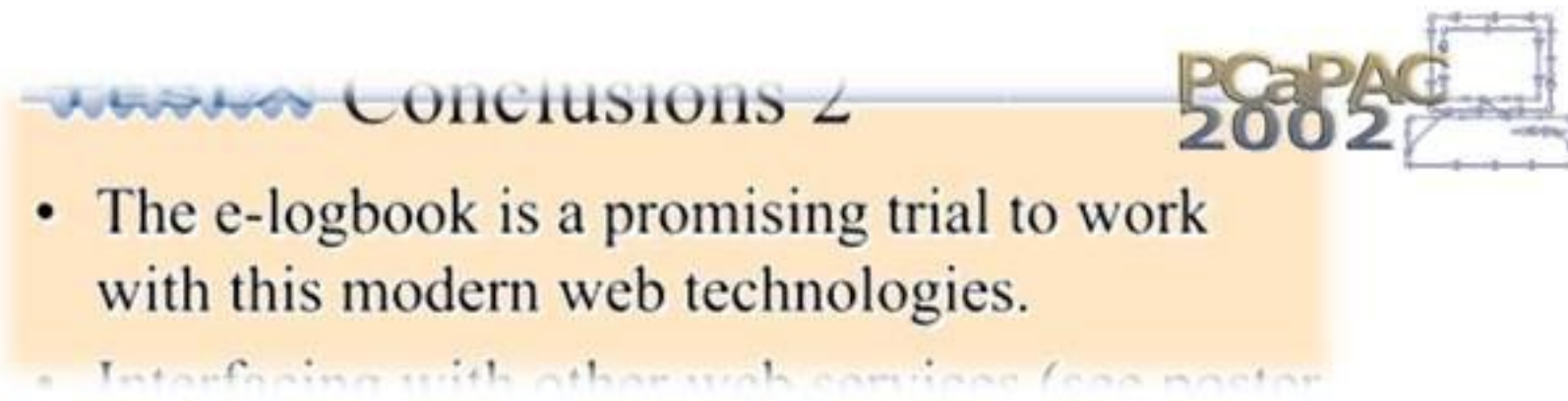
- > **Interest** for the DESY e-logbook **is not ending**
 - > Absolutely **mandatory tool** in every accelerator facility (why isn't IT providing this service?)
 - > **Used beyond** the original **scope** (group book, help system, ...)
-
- Many requests for support & maintenance (~**1 mail/day**)
 - **Workload** produced by the e-logbook still **high**
 - **Easy packaging, deployment and maintainability** is of major importance



Some facts, thoughts & conclusions

- > Some parts are in need of consultation
- > We did a big step in this direction

It started as a **test** for **web technology** in the accelerator sector:



Thank you for your attention!

I'll be back in **2017**