The Lively Cloud
A Programming and Deployment Environment for End-user Applications in the Web

Robert Hirschfeld, Jens Lincke, and Robert Krahn

Software Architecture Group
Hasso-Plattner-Institut Potsdam
www.hpi.uni-potsdam.de/swa
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Background (rhi)

• 1989-1997 | Ilmenau University of Technology
• 1994-1997 | Mercedes-Benz & Daimler-Benz
  – Software Architecture
• 1997-2001 | Windward Solutions
  – Distributed Processing Environments
  – CORBA & TINA
• 2001-2006 | NTT DoCoMo Euro-Labs
  – Dynamic Aspect-oriented Programming
  – Dynamic Service Adaptation
• 2009 | University of Tokyo (東京大学)
  – Programming Principles and Practices Group
  – Aspectual Context-oriented Programming
• Since 2006 | Hasso-Plattner-Institute
  – Software Architecture Group
  – Context-oriented Programming
  – Dynamic Programming Environments
  – Minimal Language and Application Kernels
READY
Contemporary Web Development

Server-side IDE
- Eclipse
- Visual Studio
- Emacs

Template Editor
- Dreamweaver
- GoLive
- Notepad

Browser-side Debugger
- Firebug
- Safari Debugger
- Chrome Debugger

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Contemporary Web Development

Server-side IDE
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Notepad

Dreamweaver

Dreamweaver

Dreamweaver
Lively Kernel

Server-side

Browser-side

Lively

The Radial Engine

The radial engine is was the first design for successful airplanes. Not only did its shaft cylinders save we...
Lively Wiki
The Lively Cloud

Lively Server

Server-side

Browser-side

Lively

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Lively Mashup (Under Development)
Lively Kernel-Wiki-Server-Mashup
**Lively Kernel-Wiki-Server-Mashup**

Diagram showing the flow between server-side and browser-side, highlighting the 'Lively' interactions.

The Lively Cloud
Lively Kernel-Wiki-Server-Mashup
The Lively Cloud

Lively Kernel-Wiki-Server-Mashup
Lively Kernel-Wiki-Server-Mashup
Lively Programming Models

Prototypes
Lively Programming Models
Lively Programming Models

- Layers
- Classes
- Prototypes
Lively Programming Models

Instances
Layers
Classes
Prototypes
Lively Programming Models
Lively Programming Models
Lively Programming Models
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- …
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