



Selected Adventures in Backend Development

Outline

Who are we and what is La Gentz?

Adventure 1: Developing WebApps in an agile
and distributed working environment
(i.e. How to ease .NET pains.)

Adventure 2: Bridging the gap between
performance and readable code: event-based
WSGI

Who are we?



Florian Dorfbauer

Studied technical physics, Software-developer (DICE, Infineon) and sound engineer since 1995. Dissertation about magnetic nano-particles (2006). Interdisciplinary projects with musicians, architects, designers and media-artists at the crossroads of arts and technology. Lecturer at the FH St.Pölten since autumn 2010.

Founded the La Gentz KG in 2007, together with Gregor Dorfbauer.



Gregor Dorfbauer

Education in the fields of electronics, computer sciences, administration and integration of information systems since 2003. Expert in network-safety, web 2.0 interfaces and software-design. Studies computer sciences at the University of Linz since 2007.

We're not alone: Our fantastic team!



Josef



SW Design

Robert



DB, Backend, Search Engine

Patrick



Sales

Michael



Testing, Win-Dev, DB

Barbara



UI

What are we doing?

- Plugin-Free Web-Apps (HTML5+JS).
- Backend-Development
- Code-Review + SW-Architecture (Consulting)



Yorus: enterprise-level managed
file transfer



[TIS]Board / [TIS]Designer / [TIS]Editor
agile BI solutions



Aviation: Passenger Queue Management
(measure, monitor, manage)

What are we using?

Backend



Pylons™



Microsoft
.net

PostgreSQL



ORACLE®

Microsoft
SQLServer



Frontend

Ext JS



Sencha

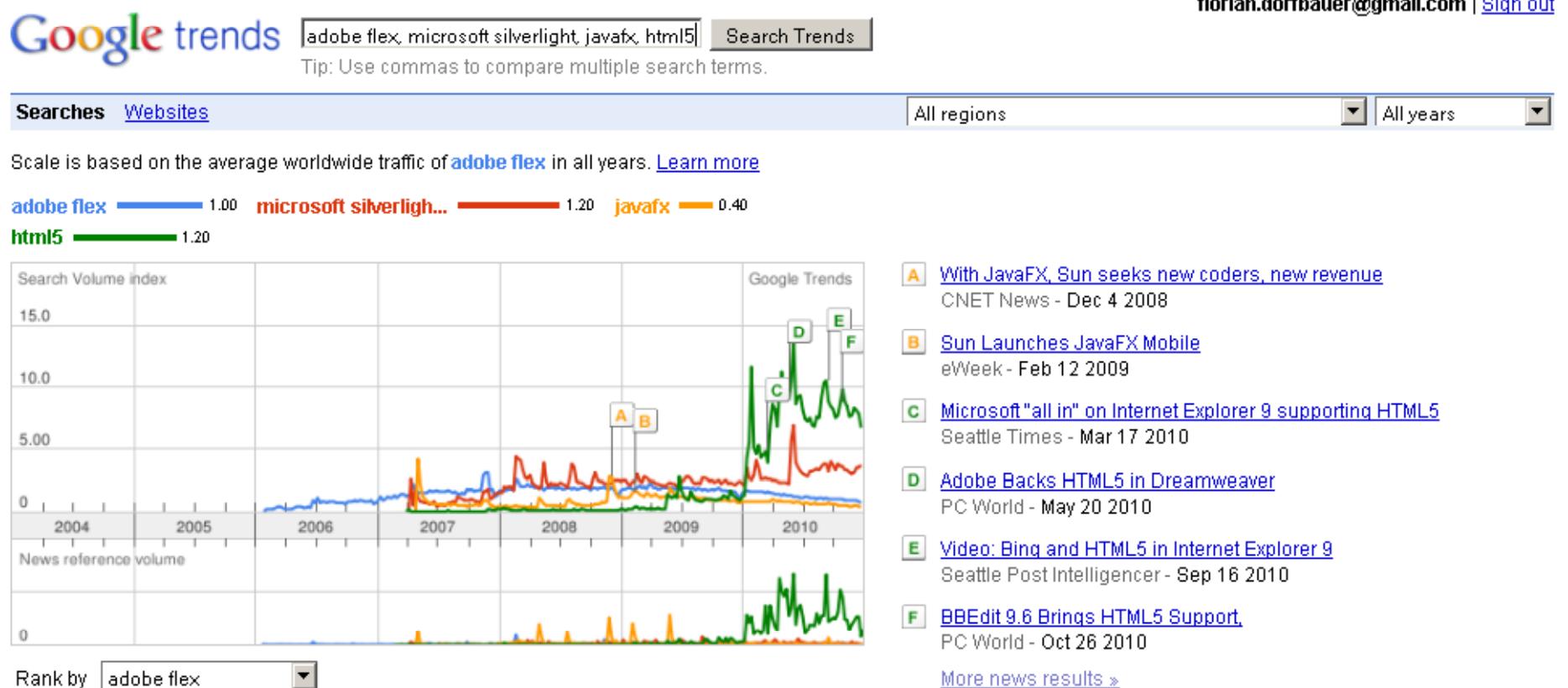


PhoneGap

Frontend: History.



What are we using?



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[TIS]Board and [TIS]Designer



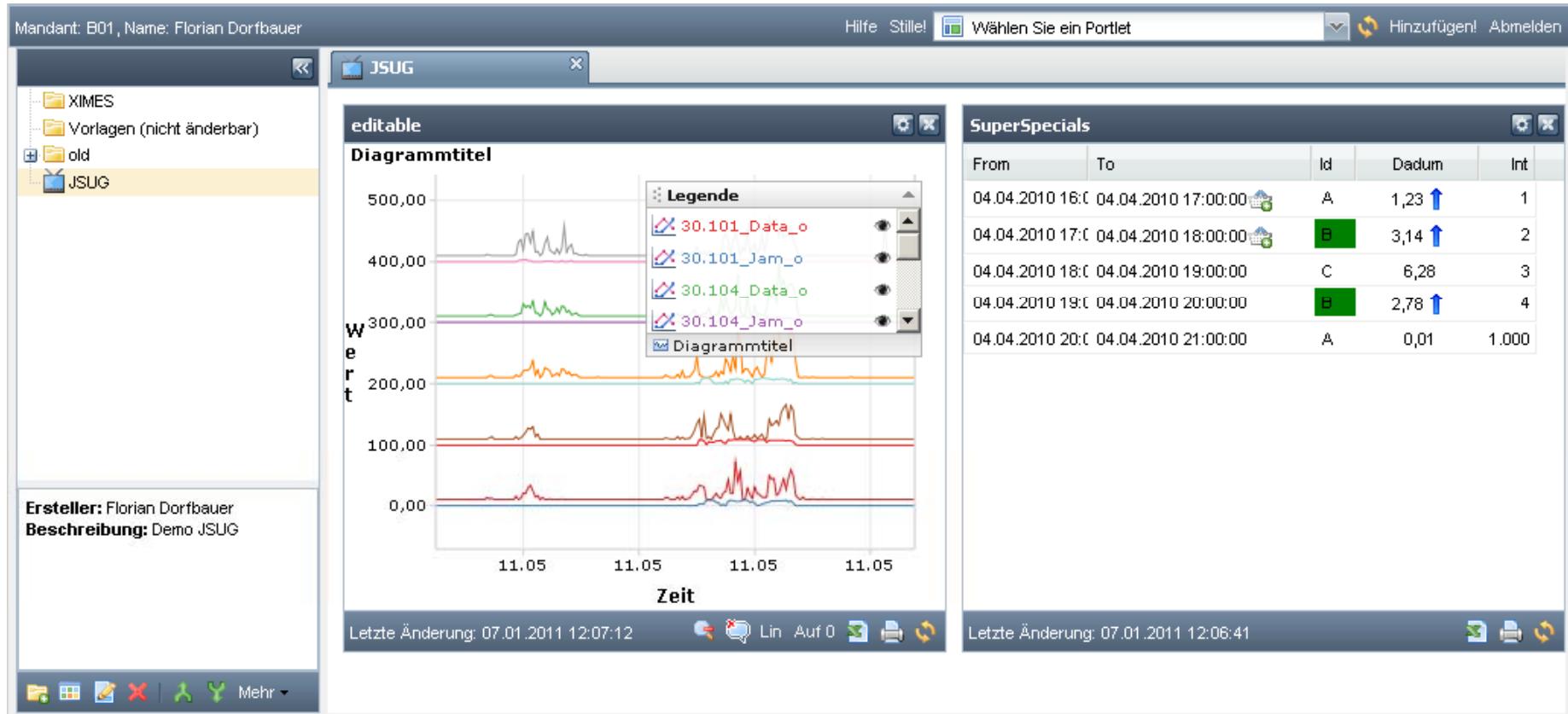
<http://www.ximes.com>

- Generic Business Intelligence Solution
- Web-Portlet-System with dynamic content (including changing metadata), IE6+, no plugins
- Visualization covers:
 - Grids, Rendered Charts, Vector-Charts, Maps, Quickviews including Sparklines, HTML Content
- Current development: interactivity (grids, charts, maps,...) – e.g. data cleansing in a chart
- What for? Human Ressource Management / Shift Plans, e.g. Call Center Management

[TIS]Board and [TIS]Designer



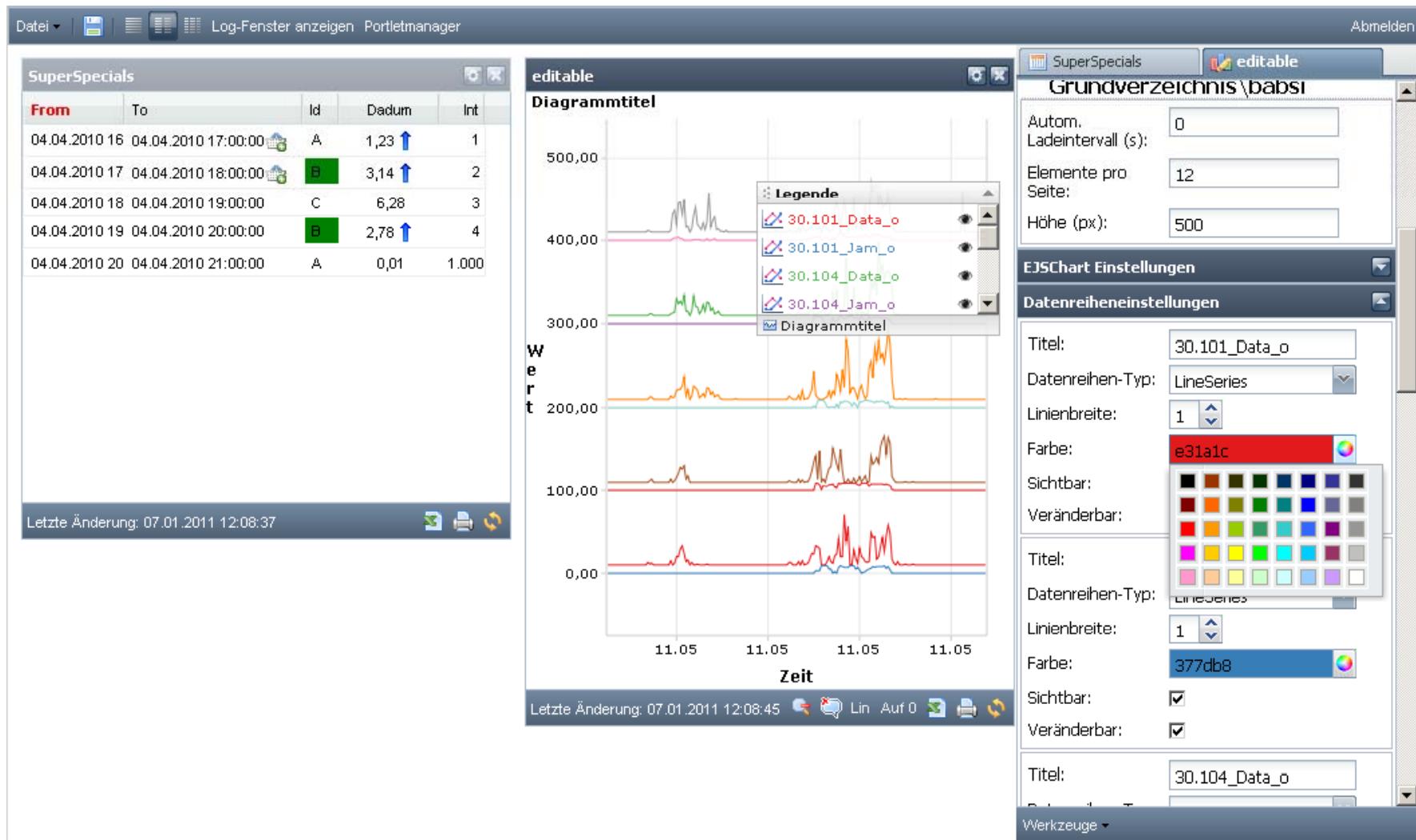
<http://www.ximes.com>



[TIS]Board and [TIS]Designer



<http://www.ximes.com>



[TIS]Board and [TIS]Designer



<http://www.ximes.com>

The screenshot shows the XIMES TISBoard application interface. On the left, there is a table titled "SuperSpecials" with columns: From, To, Id, Datum, Int. The table lists several entries, mostly POST requests to "https://www.ximeshosted.com/DEVEL/TISBoard/DispatcherService.svc". On the right, there is a "Diagrammtitel" (Diagram Title) section and a "Grundverzeichnis \pabsi" (Basic Catalog \pabsi) section. The "Grundverzeichnis \pabsi" section contains input fields for "0", "12", "500", and dropdown menus for "30.101_Data_o" (LineSeries, 1), "e31a1c" (color palette), "377db8" (color palette), and "30.104_Data_o". At the bottom, there is a "Werkzeuge" (Tools) menu.

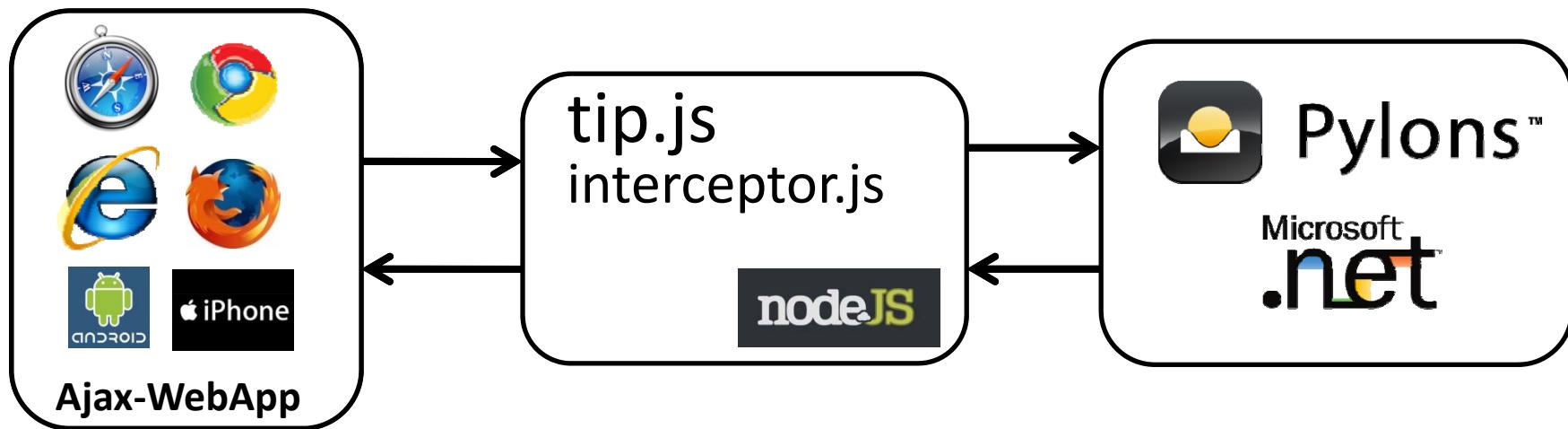
From	To	Id	Datum	Int
04.04.2010 16	04.04.2010 17:00:00	A		
04.04.2010 17	04.04.2010 18:00:00	B		
04.04.2010 18	04.04.2010 19:00:00	C		
04.04.2010 19	04.04.2010 20:00:00	D		
04.04.2010 20	04.04.2010 21:00:00	A		

Letzte Änderung: 07.01.2011 12:08:37

TIP: Translucent Intercepting Proxy



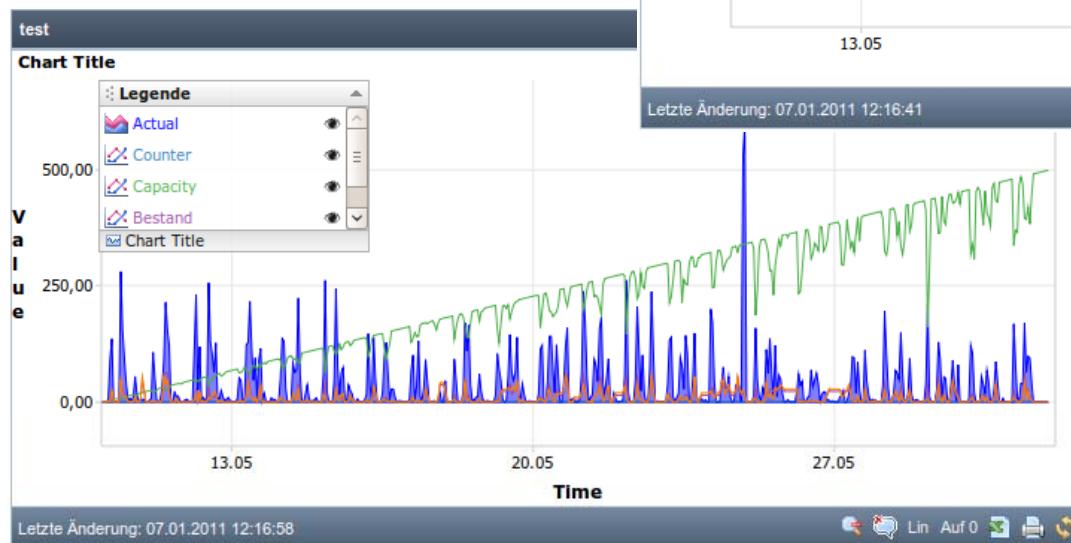
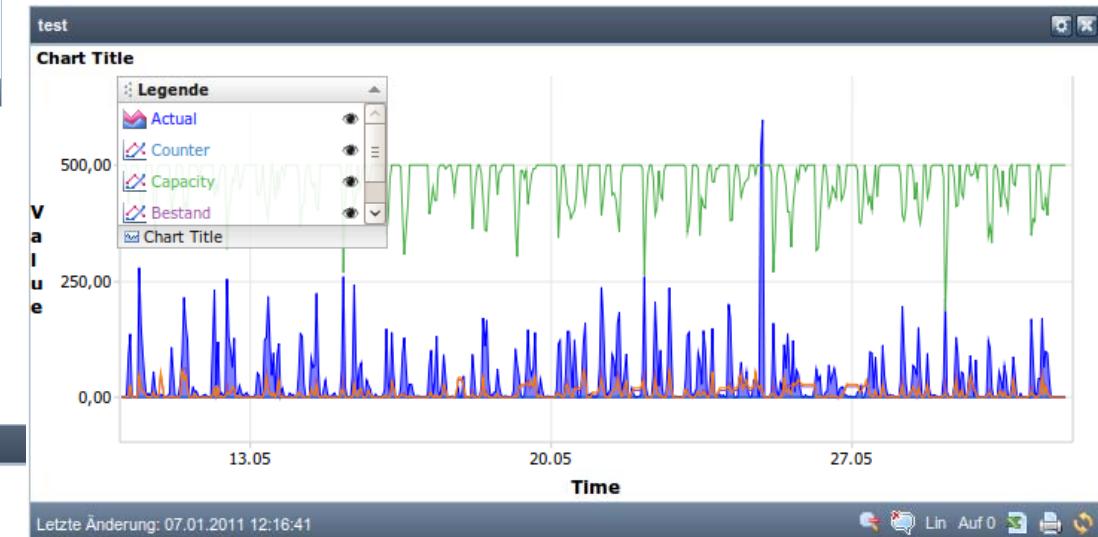
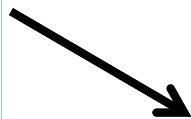
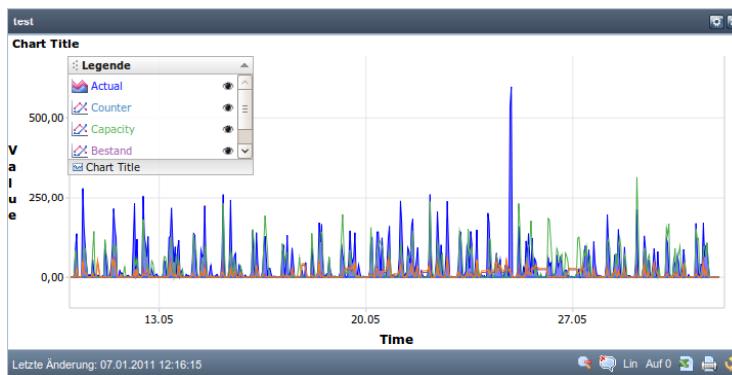
<http://www.ximes.com>



TIP: Translucent Intercepting Proxy



<http://www.ximes.com>



TIP: Translucent Intercepting Proxy

la gentz

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<http://www.ximes.com>



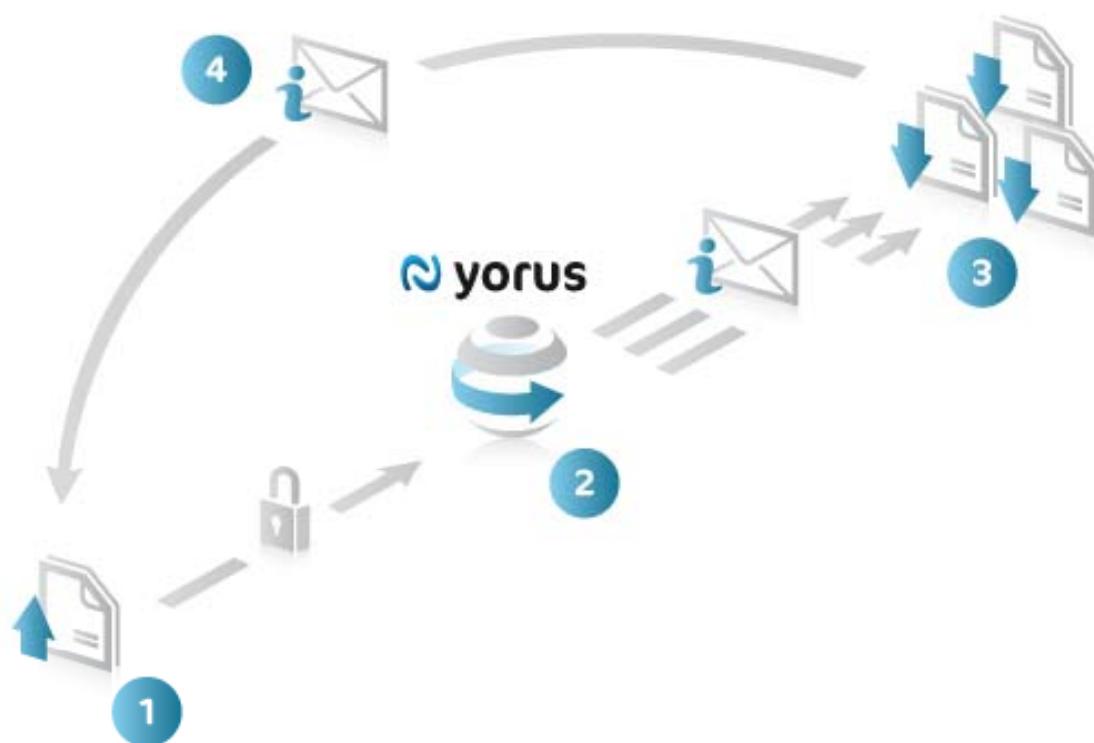
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Yorus: how it works.



- 1 You upload your files to your Yorus-Server and choose the recipients (partners, clients, etc.).
- 2 Yorus notifies the chosen recipients about the provided files.
- 3 The recipients are now able to download these files.
- 4 As soon as one of the recipients starts downloading, you get a notification. This way, you always know which of your partners is up to speed.

La Gentz yorus server^{fx}

- Austausch großer Dateien per Mail nicht praktikabel
- Vorhandene Technologie wie FTP / SCP nicht durchgängig vorhanden / verstanden
- Protokollierung („Buchhaltung“ für Dateien) wird oft benötigt

La Gentz yorus server^{fx}

- Upload im Browser, Adressaten werden per E-Mail benachrichtigt.
- Jede Datei-Operation wird protokolliert
- Zugriff überall möglich - „Web 2.0“ File-Server
- Zielmarkt Unternehmen (keine Filesharer / Web 2.0 kids)
- Branding der Oberfläche / Mails mit Kunden-CI
- Sowohl hosted Variante, als auch VM-Appliance möglich

La Géntz yorus server - Upload - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

http://yorusdev06:5000/yorus#upload

Angemeldet als: a Fehlerbericht senden Einstellungen Abmelden

yorus server fx

Start Projekte Benutzer Archiv Upload Download Filelog Timeline

Schritt 3: Nachricht hinzufügen

Upload

Gesamtfortschritt: Abgeschlossen

Datei	Fortschritt
2005_betriebsseminar.png	Abgeschlossen
2005_switchbox_UI.png	Abgeschlossen
2009_yorusfx_projekte.png	Abgeschlossen
2009_yorusfx_timeline.png	Abgeschlossen

Upload

Der Upload wurde erfolgreich abgeschlossen.

Neuer Upload

Bereit Verlauf

Fertig

YSlow

© 2007-2009 La Géntz KG, Wien.

 Upload von Josef Trauner im Projekt FleaMarket - Thunderbird

[Datei](#) [Bearbeiten](#) [Ansicht](#) [Navigation](#) [Nachricht](#) [Extras](#) [Hilfe](#)

Betreff: Upload von Josef **Von:** [LGFX#](#) 17.12.2009 16:09

Upload von *Josef Trauner* im Projekt *FleaMarket* 

Downloadlink

Sie können die Datei unter
<http://lgfx05.no-ip.org/download/id/4722>
herunterladen.

Dateien

Datei	Beschreibung
m4_projektplan_0912171600.doc	Keine Beschreibung eingegeben.

Mit freundlichen Grüßen,
la gentz your server



La Ganz yorus server - Download - Mozilla Firefox

Datei Bearbeiten Ansicht Chronik Lesezeichen Extras Hilfe

http://yorusdev06:5000/yorus#download testing

yorus server^{fx}

Angemeldet als: a Fehlerbericht senden Einstellungen Abmelden

Start Projekte Benutzer Archiv Upload Download Filelog Timeline

Name	Geändert am	Große
DreifachGedeifacht	2009-12-21 11:03	27.00 MB
11 - Lily Allen - Him.flac	2009-10-06 10:50	23.26 MB
2005_betriebsseminar.png	2009-12-21 11:03	226.31 KB
2005_switchbox_UI.png	2009-12-21 11:03	31.81 KB
2009_yorusfx_projekte.png	2009-12-21 11:03	130.30 KB
2009_yorusfx_timeline.png	2009-12-21 11:03	89.31 KB
212321	2009-10-20 14:09	127.37 KB
DreifachGedeifacht_2009-10-20_12-57-10.zip	2009-10-20 13:22	79.21 KB
image.jpg	2009-10-06 10:47	17.25 KB
LongFileNameYorus-Log_2009-09-04_13-20-17.pdf	2009-10-20 14:01	127.37 KB
OsVersion.exe	2009-11-24 13:16	6.00 KB
supertest	2009-10-20 12:53	127.38 KB
YorusContextMenu Setup	2009-11-24 13:34	2.78 MB
Yorus-Log_2009-09-04_12-56-54.pdf	2009-10-20 14:02	8.18 KB
Yorus-Log_2009-09-04_13-05-04.prf	2009-10-20 13:20	8.18 KB
EinProjekt	2009-11-04 15:17	114.04 KB
ErwinSerwin	2009-10-27 11:02	109.38 MB
LalalaMAananan	2009-10-09 11:11	
NuevoProjeto	2009-10-13 10:19	149.57 MB
OhneManager	2009-10-09 11:03	
WERKWERKWERK	2009-10-09 11:13	

Ausgewählte Dateien

2005_betriebsseminar.png	226.31 KB
2005_switchbox_UI.png	31.81 KB
2009_yorusfx_projekte.png	130.30 KB
2009_yorusfx_timeline.png	89.31 KB
Gesamt	477.73 KB

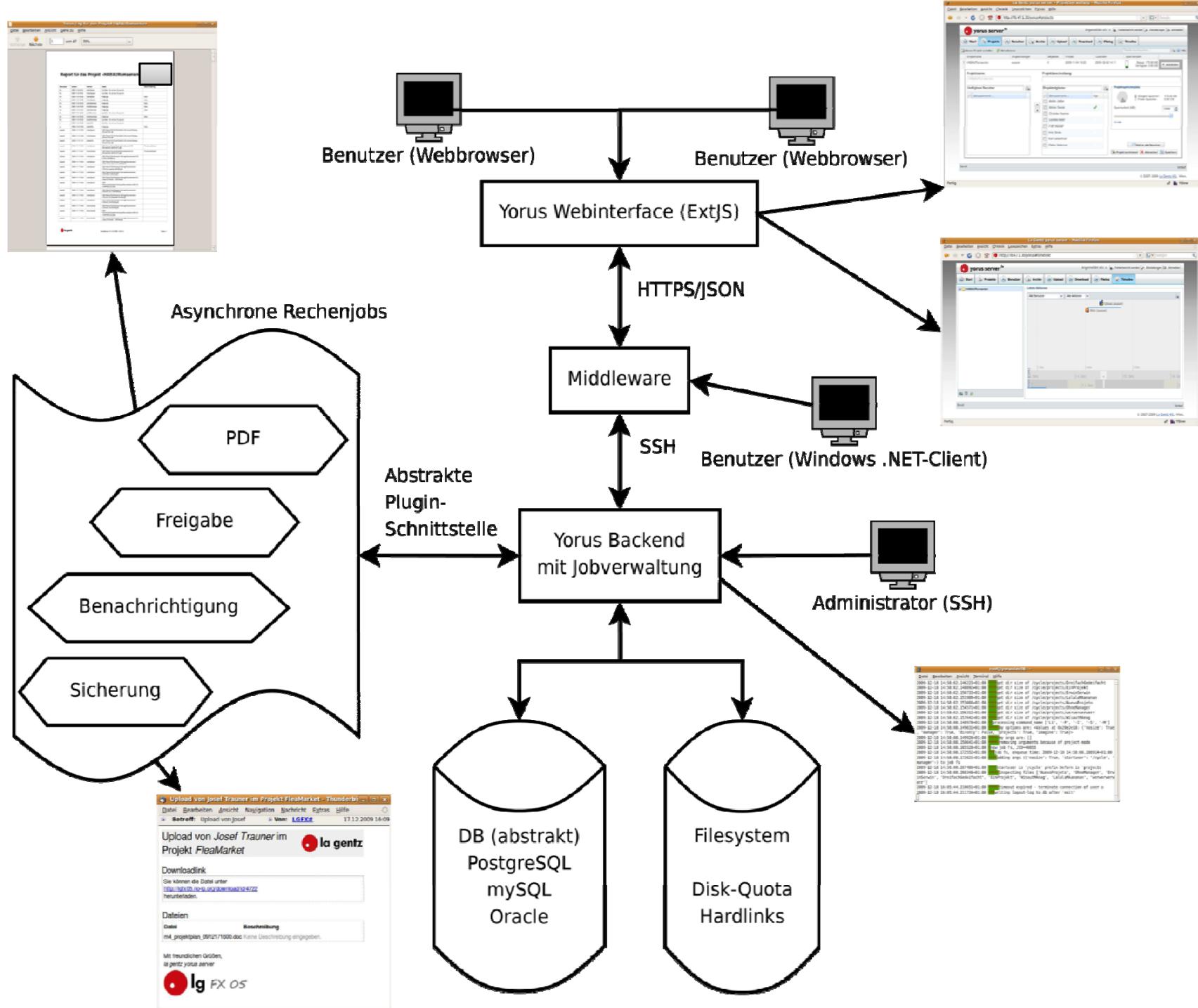
Sie haben mehr als eine Datei ausgewählt. Yorus Server wird automatisch ein ZIP-File generieren.

Download starten

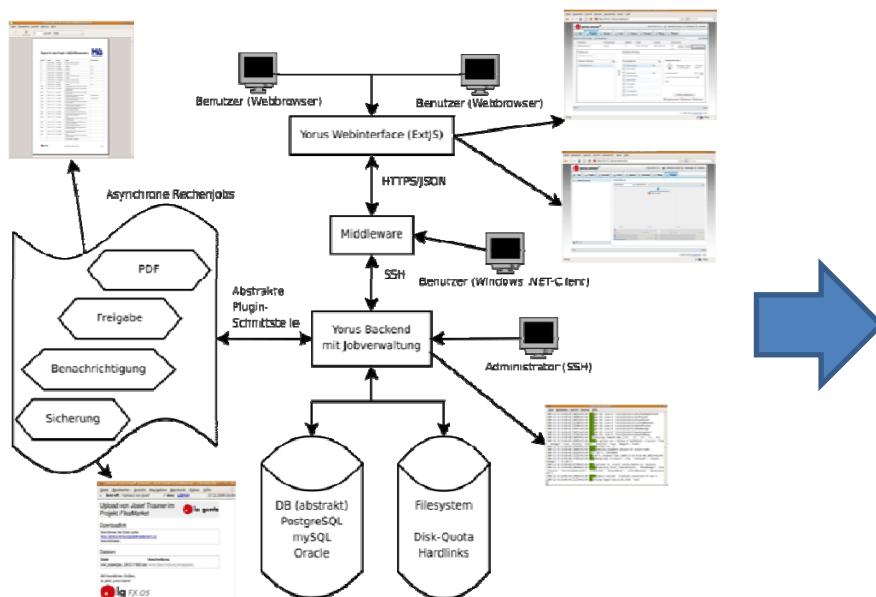
Bereit Verlauf

Übertragen der Daten von yorusdev06... YSlow

© 2007-2009 La Ganz KG, Wien.

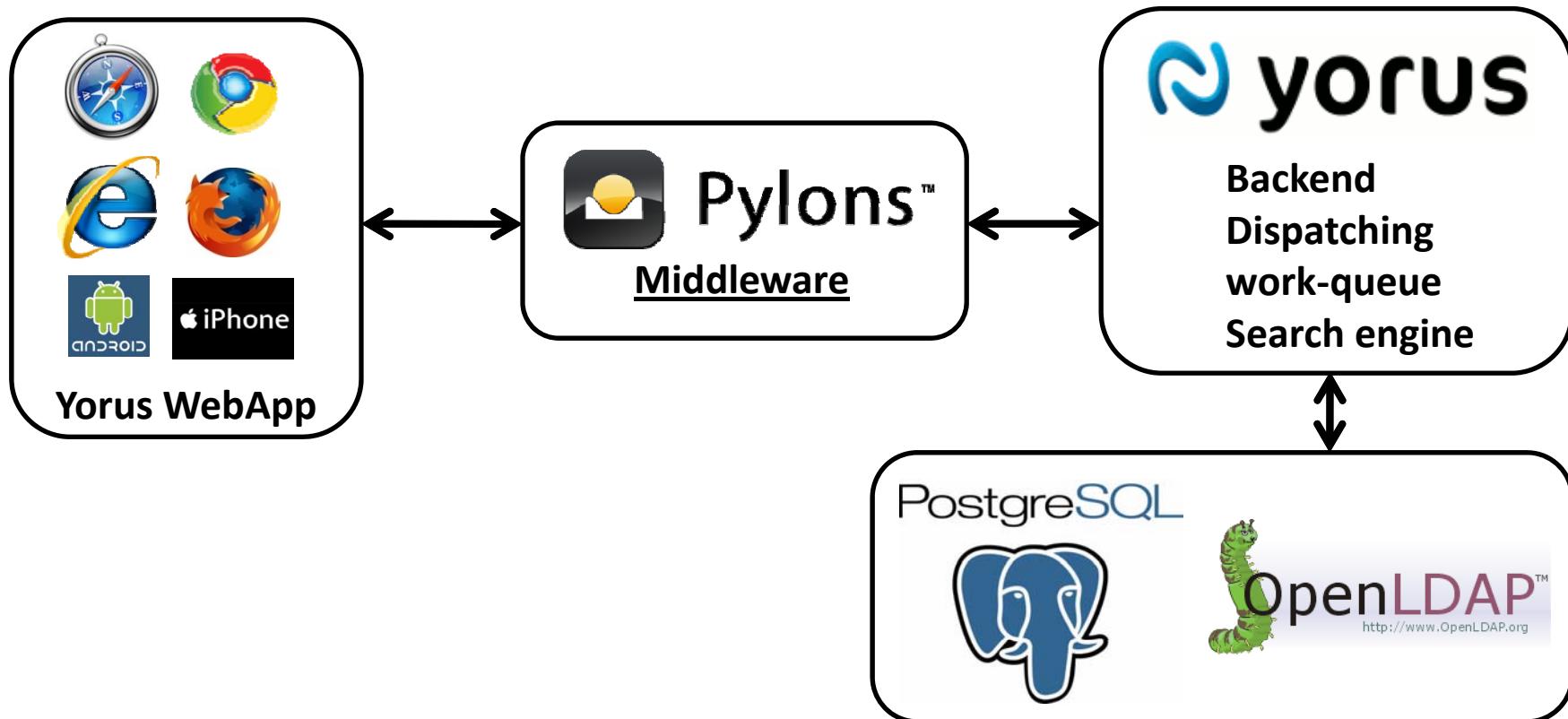


yorus server

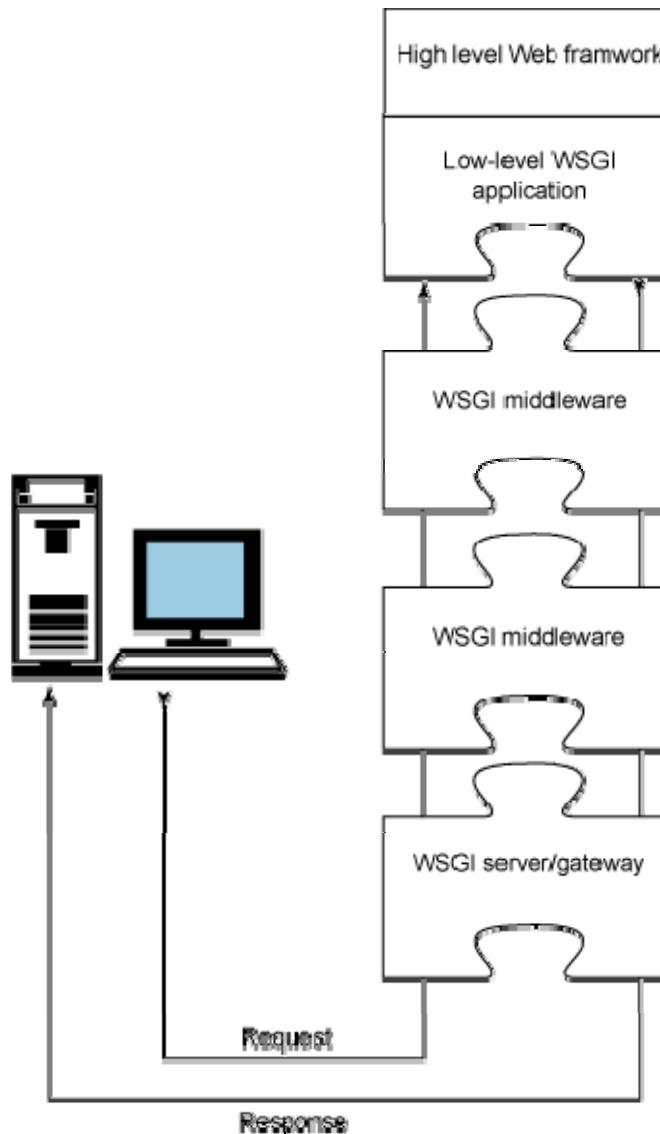


- Kernkomponenten sind abstrakt, kein Fokus auf konkretes Produkt
- 100% royalty free (keine giftigen OSS-Lizenzen)
- Appliance-tauglich (VM)
- Erweiterbar durch plugin-Konzept
- Keine Anforderungen an Clients (pures Javascript)
- Fokus auf UX
- Verwendung offener Standards an den Interfaces garantiert Kompatibilität (Bsp: LDAP / ActiveDirectory)

Yorus: a rough plot.



Python WSGI Framework



**Many WSGI compatible
Frameworks:**

- Pylons
- Django
- TurboGears
- Trac
- Zope
- ...

Python WSGI: Challenges

How to deal with:

- Many concurrent users (What's „many“?)
- Slow (blocking) Backends (MashUps, updating long processes in Frontend ...)

Python WSGI: Challenges

Approach 1

- Fixed-size thread-pool with request-queue

Approach 2

- Event-Based „blocking“ IO

Python WSGI: Challenges

Approach 1

- Fixed thread pool



Hands on!

Approach 2

- Event-based „non-blocking“ IO



Thank you for your attention!
Questions?

Keep in touch!

Drop a line:

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Give us a call:

+43 720 734 249

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<http://www.fb.com/yorus>