

# Building Portals with Scout

Scout UGM 2016, Ludwigsburg

# Agenda

→ Portals, what's new?

→ Demo

→ Portals in detail

- UI
- Authentication
- DB & Serialization
- Replication


**Portals, what's new?**

# Traditional Scout Applications – BSI CRM

- Used within corporation
- Small number of power users
- Lots of functionality

The screenshot displays the BSI CRM application interface. On the left is a dark blue sidebar menu with categories like 'Arbeit', 'Kalender', and 'Outlook'. The main area features a table with columns: 'Betreff', 'Auftrags-Nr.', 'Sparte', 'Kunde', 'Meine Rolle', 'Verkäufer', and 'Projektleite'. Below the table is a search and filter section with input fields for 'Suche', 'Detailliert', 'Zuständigkeit', 'Erweitert', and 'Kategorien'. A 'Suchen' button is at the bottom left of the search area. On the right side of the search area, there are checkboxes for 'Potenzial', 'Offerte', 'Bestellung', 'Garantiephase', and 'Lieferung'. The top right corner shows user information for 'Judith Gull' and icons for 'Assistent' and 'Telefon'.

Betreff	Auftrags-Nr.	Sparte	Kunde	Meine Rolle	Verkäufer	Projektleite
BSI CRM 15	14-7H	Produkt	BSI BADEN	Entwickler	Christian Rusche	Hannes Müller
BSI Scout 15	15-B1	Produkt	BSI BADEN	Entwickler	Hannes Müller	Hannes Müller

closed source,  
based on  
 Eclipse Scout

# Product – BSI Portal

- Consumer facing
- Lots of users
- Simple UI/business logic

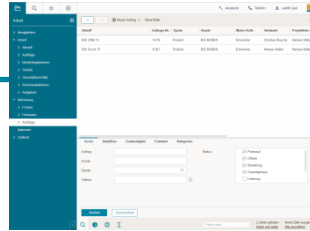
The screenshot shows the 'myFAST&SAFE' customer portal. The header includes the logo and a user profile dropdown for 'User [lenameier726@gmail.com]'. A left sidebar lists navigation options: Übersicht, Persönliche Daten, Nachrichten, Versicherungspolice, Prämienabrechnungen, Leistungsabrechnungen, Prämienrechner, and Dokumente. The main content area is divided into several sections:

- Letzte Rechnungen**: A table showing payment status. Under 'Offen', there is a 'Selbstbehalt' of CHF 98.50 (due 14.10.16) and a 'Prämie' of CHF 37.00 (due 01.11.16). Under 'Bezahlt', there is a 'Prämie (September 2016)' of CHF 37.00 and a 'Selbstbehalt' of CHF 216.40.
- Kosten Motorradversi...**: A pie chart showing cost distribution: Vollkas... (68%), Haftpfi... (25%), and Option: ... (7%).
- Kontakt aufnehmen**: Contact information for 'Fast&Safe Agentur Baden' at Rütistrasse 3, 5401 Baden, with email 'baden@fastandsafe.ch'.
- Prämien**: A bar chart comparing 'Prämien [CHF]' (blue) and 'Auszahlungen [CHF]' (green) for the years 2014, 2015, and 2016. The chart shows a general upward trend in both categories.
- Beratungstermin anfordern**: A button with a calendar icon.
- Chat starten**: A button with a speech bubble icon.
- Kundenhistorie**: A section at the bottom with an envelope icon.

closed source,  
based on  
 Eclipse Scout

# CRM vs. Portal

## BSI CRM



Data / Queries dynamic, complex

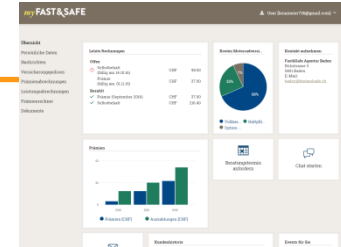
UI desktop first  
poweruser  
complex input

Security Intranet

Availability high during office hours,  
shutdown during an upgrade

Scalability thousands of users  
Static

## BSI Portal



simple

mobile first, modern web app  
occasional users  
a lot of read-only data

customer CI /CD

DMZ

high

10-thousands of users  
more dynamic

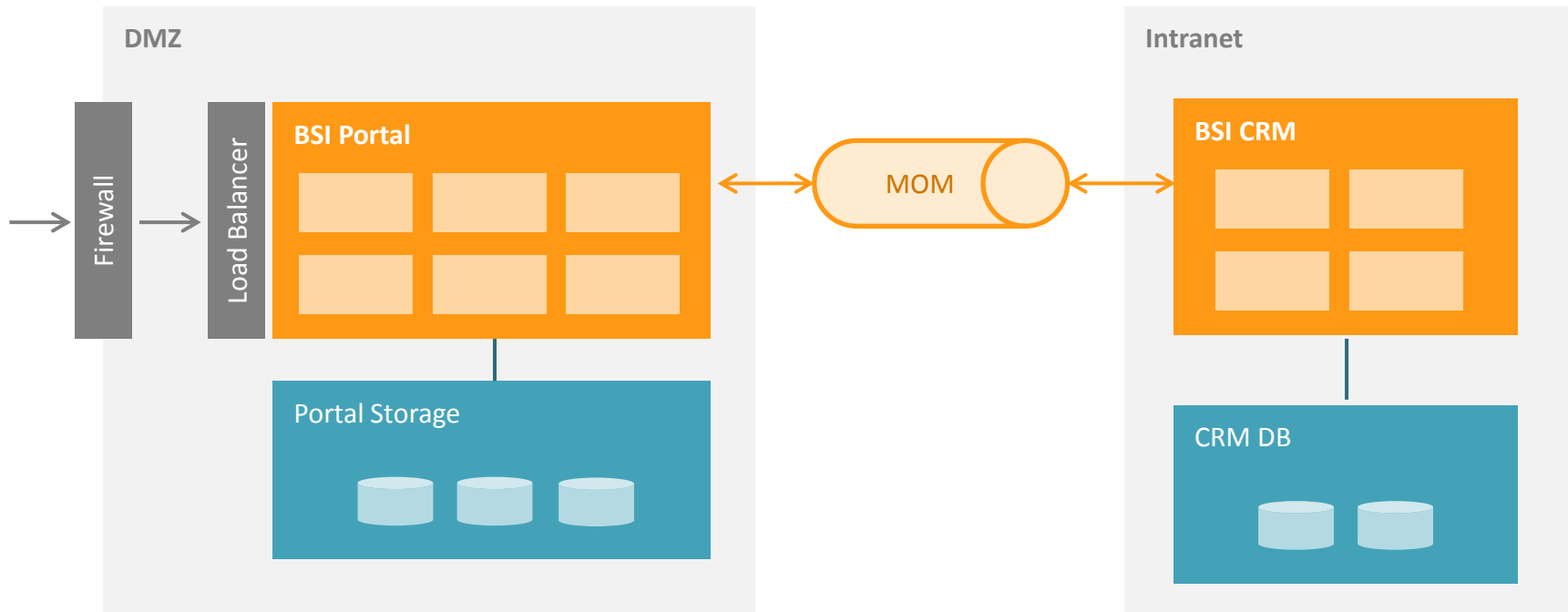
# Portals and Scout



**Based on Scout 6.1**

- Regular Scout app with java client model
- Some JS code to meet UI requirements

# BSI Portal System Landscape





# Demo

**my FAST&SAFE** User [lnameier726@gmail.com] ▾

**Übersicht**

- Persönliche Daten
- Nachrichten
- Versicherungspolizen
- Prämienabrechnungen
- Leistungsabrechnungen
- Prämienrechner
- Dokumente

### Letzte Rechnungen

Status	Beschreibung	Währung	Betrag
Offen			
⊖	Selbstbehalt (fällig am 14.10.16)	CHF	98.50
	Prämie (fällig am: 01.11.16)	CHF	37.00
Bezahlt			
✓	Prämie (September 2016)	CHF	37.00
✓	Selbstbehalt	CHF	216.40

### Kosten Motorradversi...

Kategorie	Anteil
Vollkas...	68%
Haftpfl...	25%
Option: ...	7%

### Kontakt aufnehmen

**Fast&Safe Agentur Baden**  
Rütistrasse 3  
5401 Baden  
E-Mail: [baden@fastandsafe.ch](mailto:baden@fastandsafe.ch)

### Prämien

Jahr	Prämien [CHF]	Auszahlungen [CHF]
2014	~5	~15
2015	~15	~25
2016	~25	~45

Beratungstermin anfordern

Chat starten

**Kundenhistorie**

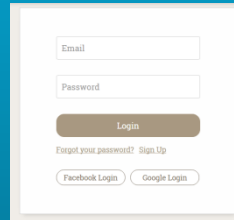
**Events für Sie**



**UI**



**DB &  
Serialization**



**Authentication**

MOM

**Replication**

# Portals in Detail



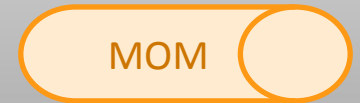
UI



DB &  
Serialization

An illustration of a login form. It features two input fields labeled 'Email' and 'Password', a 'Login' button, a link for 'Forgot your password? Sign Up', and two social login buttons: 'Facebook Login' and 'Google Login'.

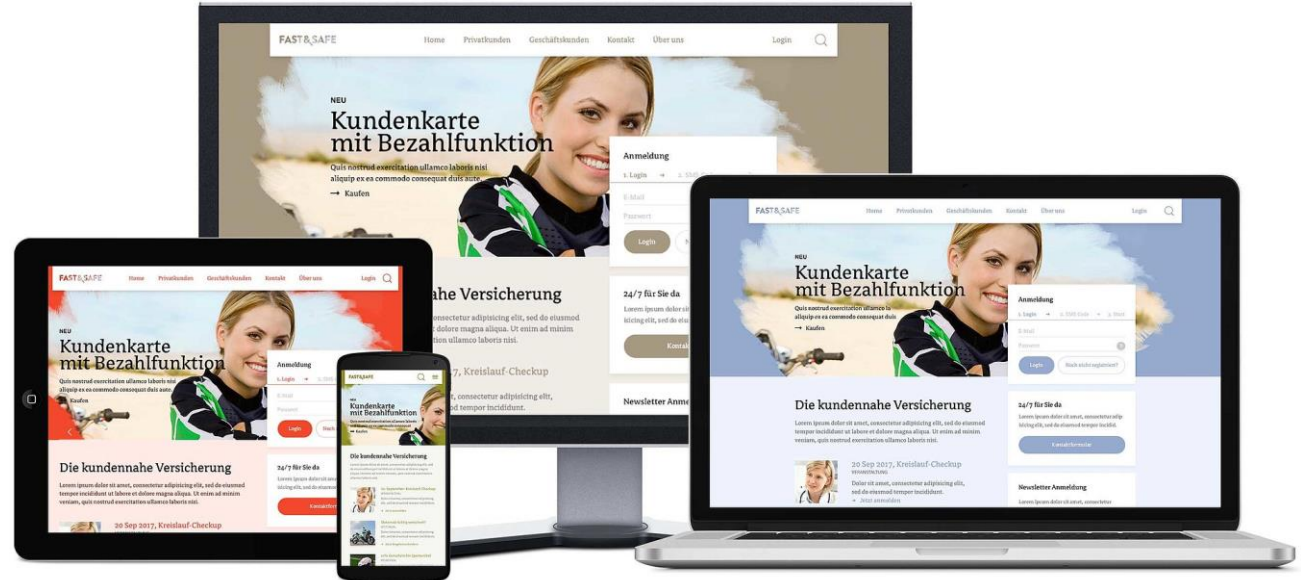
Authentication



Replication

# UI

- Customer's corporate identity
  - More than styling colors
  - But no intention to implement any style guide 100% accurately



# UI –Themes for Styling

- 2 ways of manipulating CSS with Scout:
  - Adding rules
  - Replacing original file



# UI - Layout

- Mobile/Tablet is important
  - Custom device transformer
  - No tree in mobile/tablet, instead menu
  - Responsive grid
- Desktop layout
  - No ViewButtons
  - Desktop size depends on content (preferred size), replaced js

# UI – Future Improvements

- Keystrokes support
- Focus handling
- Busy indicator
- Error message location



UI



DB &  
Serialization

Email

Password

Login

[Forgot your password?](#) [Sign Up](#)

[Facebook Login](#) [Google Login](#)

Authentication

MOM

Replication



# Authentication

- Guest
  - No account, limited functionality
- OAUTH2
  - Facebook
  - Google
- Username/password
- Verification with a second factor

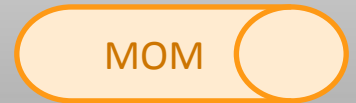


UI



DB &  
Serialization

Authentication



Replication

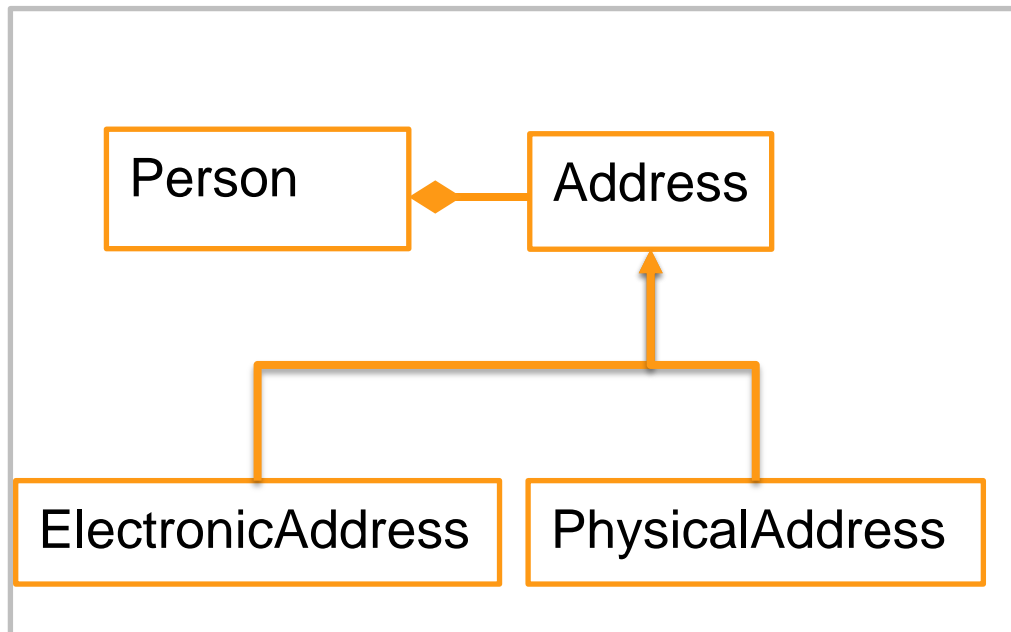
# Couch DB

- NoSQL
- HTTP/JSON API
- Designed for reliability
- Synchronization



# Serialization with Jackson:

## Custom Scout Resolver for Polymorphic Types



```
{
  "name" : "Lena",
  "addresses" : [ {
    "street" : "Förllibuckstr."
  } ]
}
```





UI



DB &  
Serialization

Email

Password

Login

[Forgot your password?](#) [Sign Up](#)

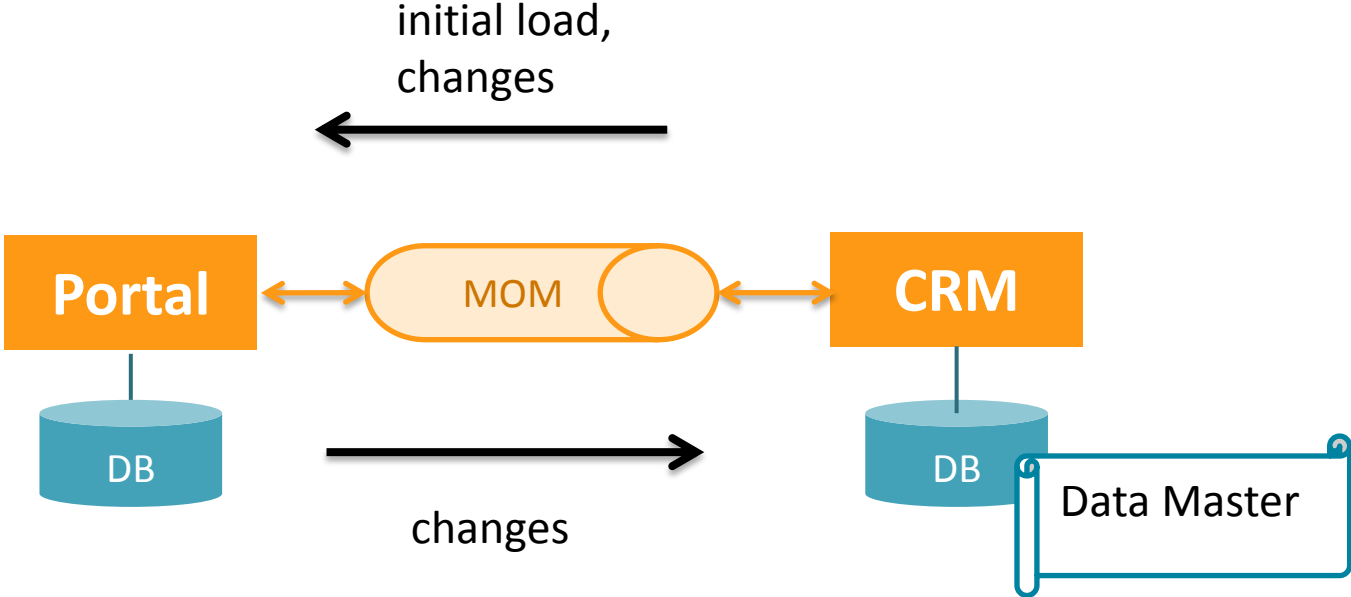
[Facebook Login](#) [Google Login](#)

Authentication

MOM

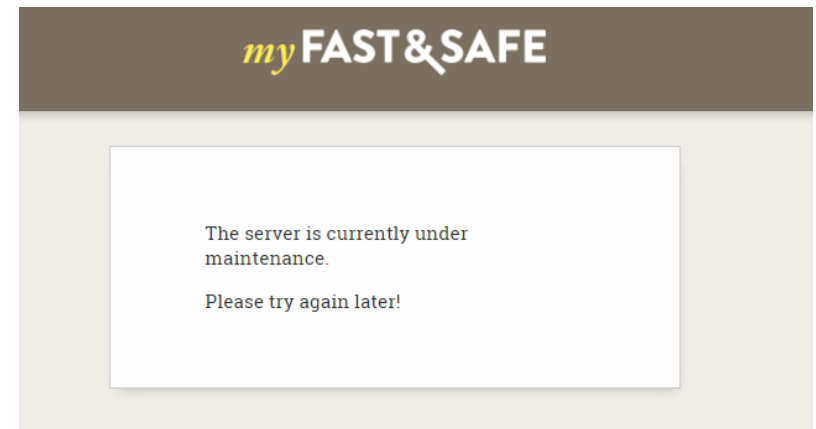
Replication

# Replication - Setup



# Initial Load

- Start with empty db
- Synchronize data from CRM (data master)
- Only allow access to application after initial load:



# Replicating Changes

- MOM.subscribe(PortalMom.class, myTopic, listener)
- MOM.publish(PortalMom.class, myTopic, result);





**Thanks!**

@EclipseScout

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