

Effiziente Entwicklung von mobilen Geschäftsanwendungen

Matthias Zimmermann, BSI Business Systems Integration AG
OOP, München, 24.1.2013



@EclipseScout

Effiziente Entwicklung von (mobilen) Geschäftsapplikationen

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- Mobile Clients werden immer wichtiger
- Desktop Client für Power User bleibt wichtig
- Parallele Entwicklung (zu) teuer
- Was nun?

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Gemeinsame Sprache / Entwicklungswerkzeuge

Konsistente Business Rules

Konsistente Features

CRM auf Mobile, Tablet, Browser, Desktop



Desktop

The screenshot displays the BSI CRM desktop interface. The main window is titled "BSI CRM - mzi" and features a navigation menu on the left with categories like "Firmen", "Personen", "Aufträge", "Tickets", "Kommunikation", "Aufgaben", and "Dokumente". The "Personen" category is selected, showing a list of records with columns for "Nachname", "Vorname", "Firma", "Sprache", "Funktion", and "Level". The record for "Homer" is highlighted.

A "Person" modal window is open, displaying the details for the selected record. The "Name" field is filled with "Homer". The "Hauptbetreuer" field is filled with "Zimmermann, Matthias". The "Sprache" field is filled with "Griechisch". The "Anrede" field is filled with "Herr". The "Stellenbeschr." field is filled with "Autor von Iliad and the Odyssey". The "Geburtsdatum" field is empty. The "Adresse" tab is selected, showing the "Privatadresse" checked. The "Ort" field is filled with "101 88 Athens (GR)".

The "Person" modal window contains the following fields and options:

- Name: * Homer
- Vorname: [Empty]
- Firma: [Empty]
- Hauptbetreuer: * Zimmermann, Matthias
- Aktiv
- Unpersönlich
- Angaben zur Person:
 - Abteilung: [Empty]
 - Titel: [Empty]
 - Sprache: * Griechisch
 - Stellenbeschr.: Autor von Iliad and the Odyssey
 - Anrede: * Herr
 - Geburtsdatum: [Empty]
 - Funktion / Level: [Empty]
- Adresse:
 - Ferienadresse
 - Privatadresse
 - Zusatzname: [Empty]
 - Strasse: [Empty]
 - Postfach: [Empty]
 - Ort: * 101 88 Athens (GR)
 - Telefon: [Empty]
 - Fax: [Empty]
 - Mobile: [Empty]
 - VoIP: [Empty]
 - E-Mail: [Empty]
 - Standard
 - Alternativ
 - Korrespondenz

Buttons: Zurücksetzen, Suche, Ok, Abbrechen

Web

The screenshot shows a web browser window with the URL https://partner.bsiag.com/int/bsicrm_12_8/web#com.bsiag.crm.client.core.desktop.StandardOutline-Personen. The application is titled "BSI CRM INTEGRATION - mzi".

The left sidebar contains a navigation menu with the following items: Firmen, Personen, Aufträge, Tickets, Kommunikation, Aufgaben, and Dokumente. The "Personen" item is selected.

The main content area displays a "Person" profile for "Homer". The profile includes the following fields:

- Name: * Homer
- Vorname: (empty)
- Firma: (empty)
- Hauptbetreuer: * Zimmermann, Matthias
- Aktiv
- Unpersönlich

Below the profile is a section titled "Angaben zur Person" with the following fields:

- Abteilung: (empty)
- Sprache: * Griechisch
- Anrede: * Herr
- Funktion / Level: (empty)
- Titel: (empty)
- Stellenbeschr.: Autor von Iliad and the Odyssey
- Geburtsdatum: (empty)

The "Adresse" tab is active, showing the following fields:

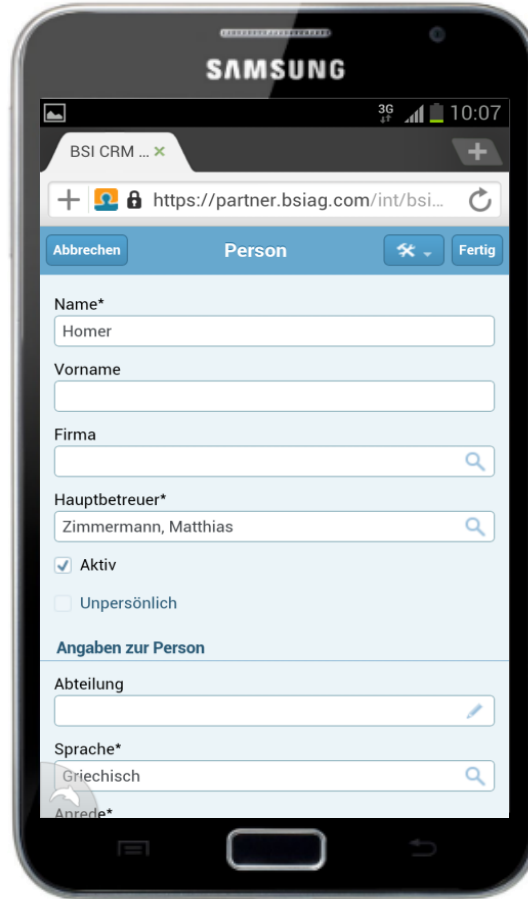
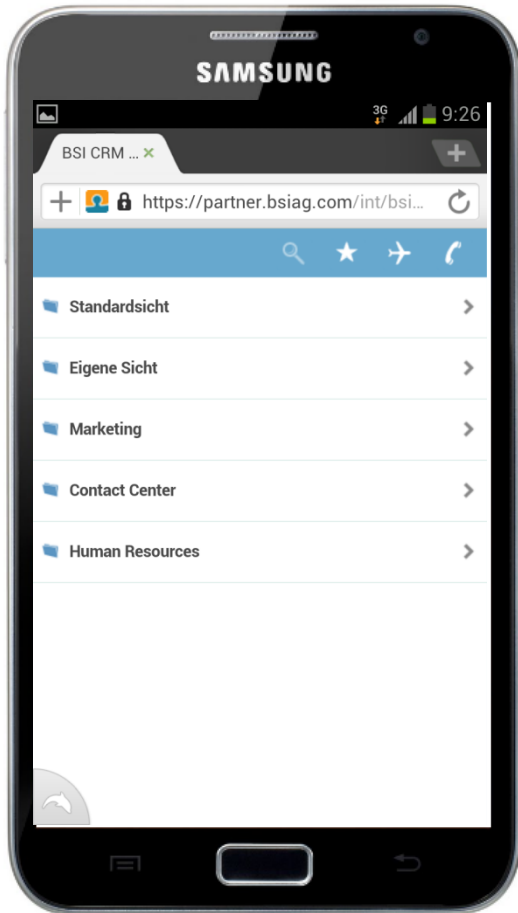
- Ferienadresse
- Privatadresse
- Zusatzname: (empty)
- Strasse: (empty)
- Postfach: (empty)
- Ort: * 101 88 Athens (GR)
- Telefon: (empty)
- Fax: (empty)
- Mobile: (empty)
- VoIP: (empty)
- E-Mail: (empty)

At the bottom of the address section, there are checkboxes for Standard, Alternative, and Korrespondenz. Below these is the text "Existiert bereits?".

At the bottom right of the profile form, there are two buttons: "Ok" and "Abbrechen".

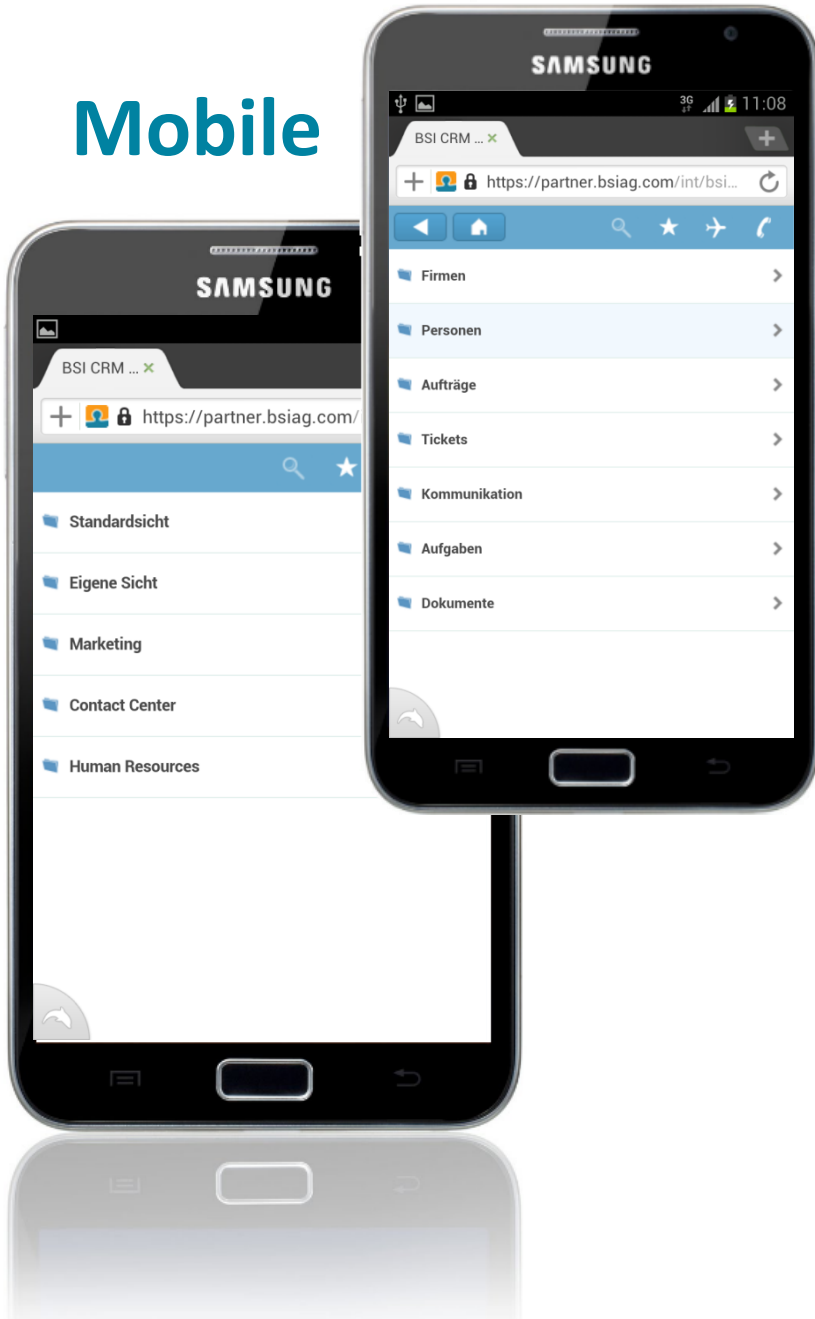
At the bottom left of the browser window, it says "1 Objekt, 1 ausgewählt".

Mobile



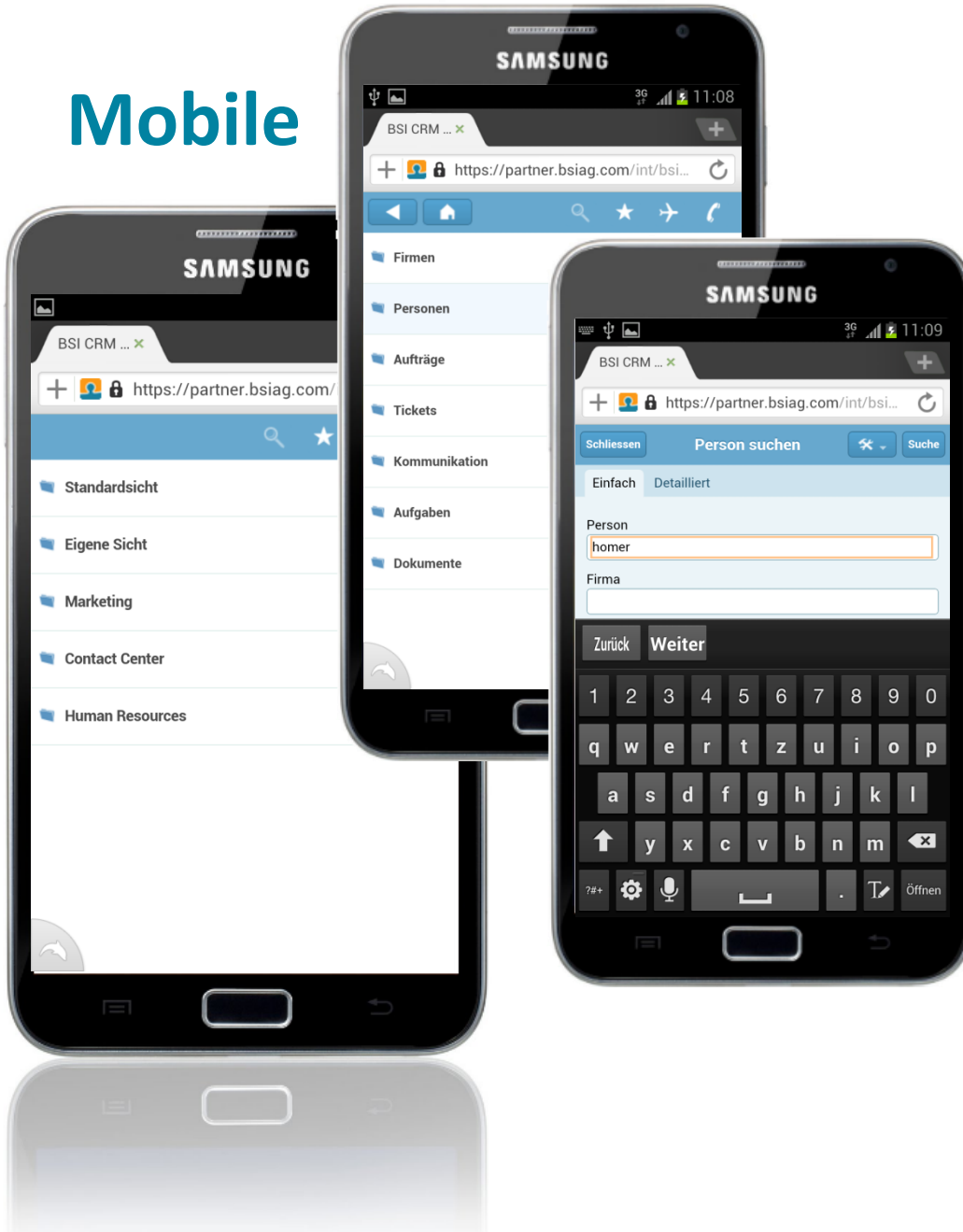
Mobile

Standardsicht



Mobile

Person suchen



Mobile

Person bearbeiten



Wie funktioniert?

Eine gemeinsame Codebasis

mit Eclipse Scout

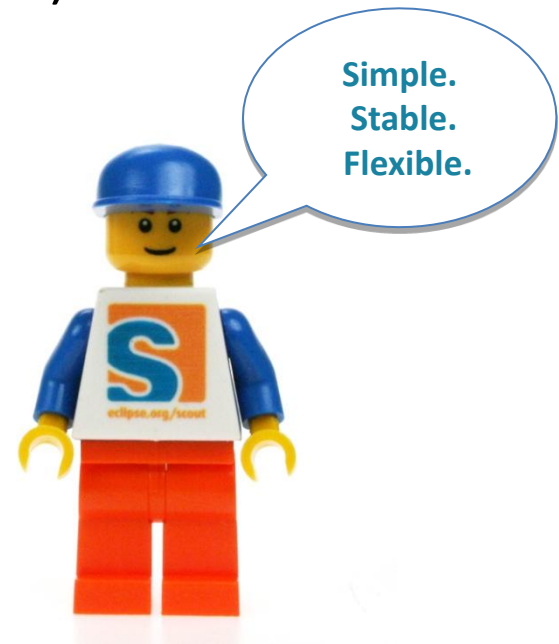
Was ist Eclipse Scout?

- Open Source **Java/Eclipse** Framework
- Designed for **Business Applications**
- **Multi Frontend** (Desktop, Web, Mobile)

Boost productivity

Simple to learn

Desktop, Web & Mobile



Scout Geschäftsanwendung

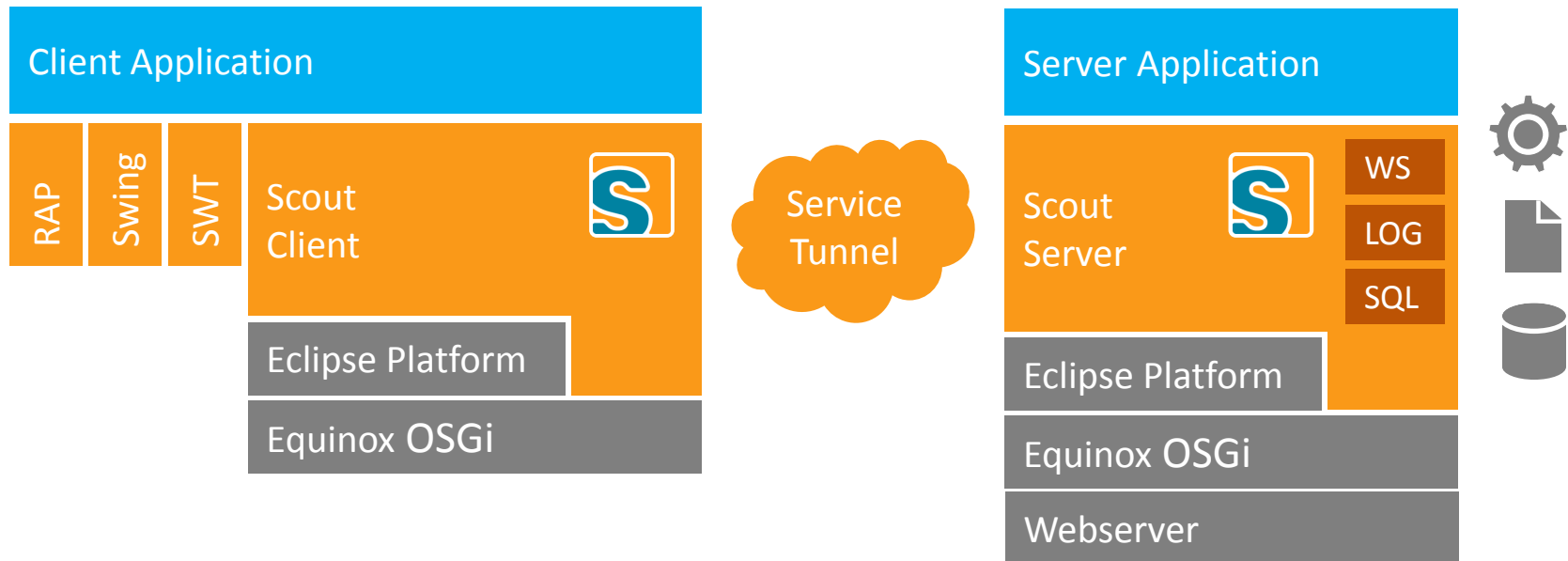
Application

Scout



Eclipse / Java

Client-Server



Scout im Unternehmen

Client

UI

Client Model

Scout
Client



Server

Application
Layer

Scout
Server



Business
Services

ESB

Data Access



Eclipse Scout Anwendung

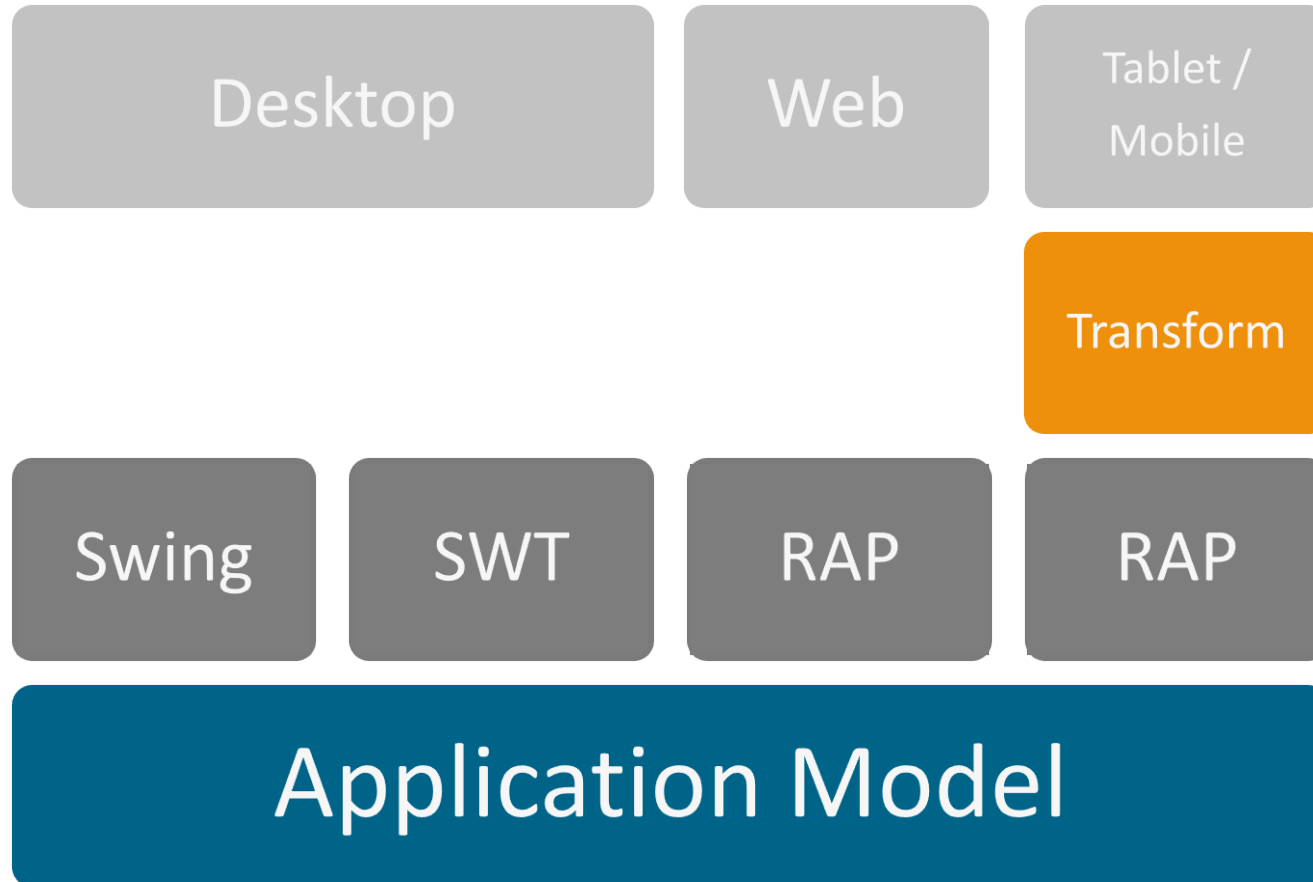
Multi-frontend Strategie

Eine Codebasis für alle Endgeräte

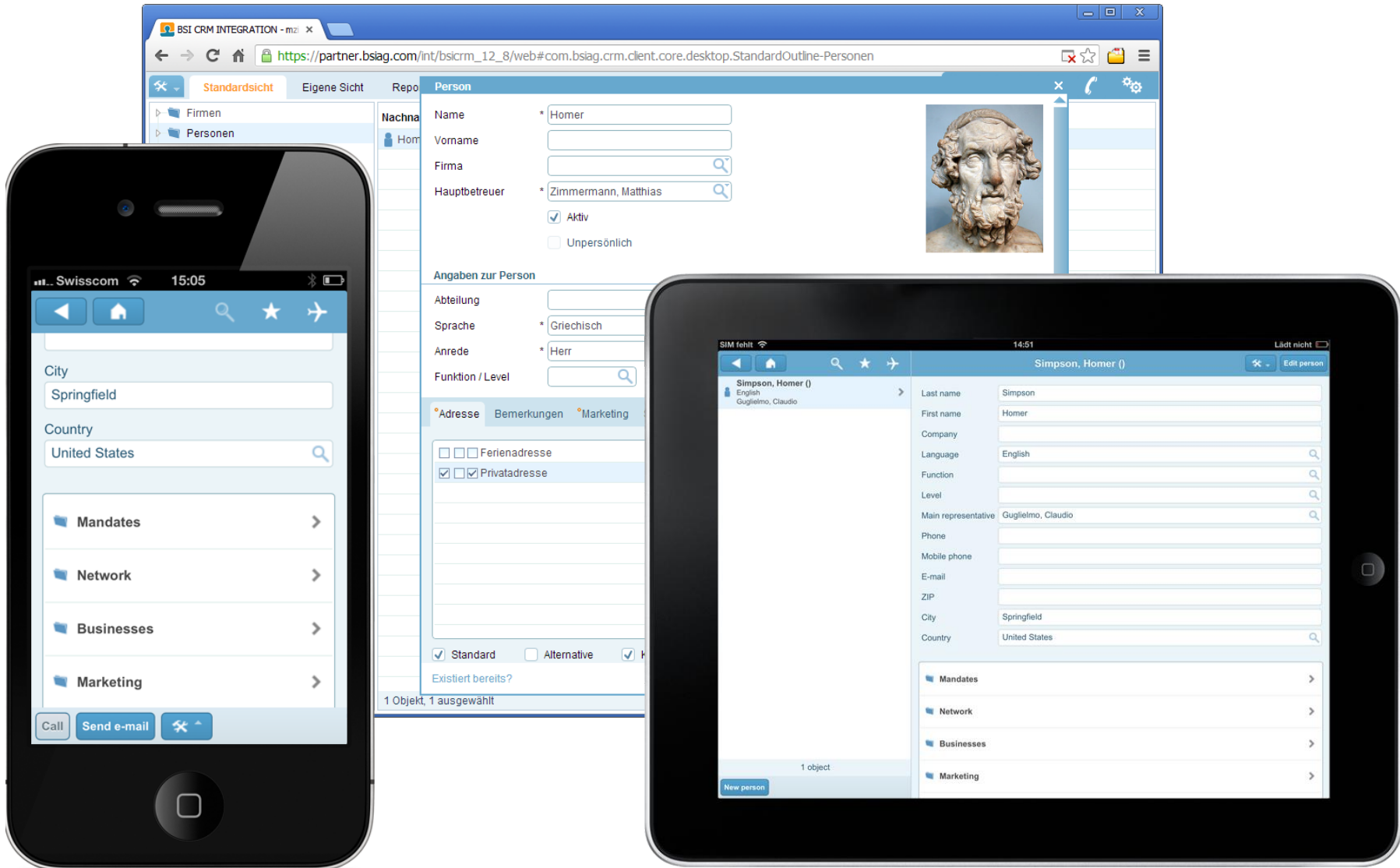
Optimiert pro Endgerät

- GUI Transformation zur Laufzeit
- GUI Komponenten
- Look and Feel

Eine Codebasis für alle Endgeräte





GUI Transformation zur Laufzeit




GUI Komponenten

Tabelle für Desktop

Last name	First name ▲	Language	Main representative	City
 Simpson	Homer	English	Guglielmo, Claudio	Springfield
 Simpson	Lisa	English	Guglielmo, Claudio	Springfield



Smartfield für Desktop



- Bulgarian
- Croatian
- Czech
- Dutch
- English
- French
- German
- Greek

GUI Komponenten

Tabelle für Desktop



Last name	First name ▲	Language	Main representative	City
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Smartfield für Desktop





- Bulgarian
- Croatian
- Czech
- Dutch
- English
- French
- German
- Greek

... für Mobile

-  **Simpson, Homer ()**
English
Guglielmo, Claudio >
-  **Simpson, Lisa ()**
English
Guglielmo, Claudio >

GUI Komponenten



Tabelle für Desktop

Last name	First name ▲	Language	Main representative	City
 Simpson	Homer	English	Guglielmo, Claudio	Springfield
 Simpson	Lisa	English	Guglielmo, Claudio	Springfield

Smartfield für Desktop

- Bulgarian
- Croatian
- Czech
- Dutch
- English
- French
- German
- Greek

... für Mobile

-  **Simpson, Homer ()**
English
Guglielmo, Claudio >
-  **Simpson, Lisa ()**
English
Guglielmo, Claudio >

... für Mobile

Choose Language

- Bulgarian
- Croatian
- Czech
- Dutch
- English

Scout SDK

Das Entwicklungswerkzeug

Eclipse Scout Tooling

Einfach zu lernen mit Scout SDK

Navigationshilfen und viele Wizards

Voraussetzung: Gute Java (SE) EntwicklerInnen

- Keine Kenntnisse in **JavaScript, Objective-C, ...**
- Minimale Kenntnisse in **JEE**
- Minimale Kenntnisse zur **Eclipse als Platform**

Feld „First Name“ im Dialog

The screenshot displays the Scout IDE interface with the following components:

- Scout Explorer:** A tree view on the left showing the project structure. The 'PersonForm (Person)' form is selected, and its 'FirstNameField (First Name)' is highlighted.
- Scout Object Properties:** A central panel showing the configuration for the 'FirstNameField (First Name)'.
 - Appearance:** Label: First Na
 - Layout:** Grid W: 1, Grid H: 1
 - Behavior:** Mandatory: ; Multiline Text: ; Wrap Text:
 - Data:** Max Length: 4000
 - Operations:** Exec Init Field, Exec Validate Value, Exec Changed Value
- Code Editor:** The 'PersonForm.java' file is open, showing the implementation of the 'FirstNameField' class. A red circle with the number '1' and an arrow points to the 'protected boolean getConfiguredMandatory()' method, which returns 'true'.
- Person Dialog Preview:** A floating window titled 'Person' showing a form with the following fields:
 - Picture URL:
 - Picture:
 - First Name: (marked as mandatory)
 - Last Name:
 - Detail: Company: ; Headline: ; Location: ; Date of Birth:

Der Dialog im Scout Explorer

The screenshot illustrates the configuration of a form field in the Scout Explorer IDE. The Scout Explorer tree on the left shows the project structure, with an orange arrow and the number '2' pointing to the 'PersonForm (Person)' form. The Scout Object Properties panel in the center shows the configuration for the 'FirstNameField (First Name)' field, including appearance, layout, behavior (Mandatory checked), and data (Max Length 4000). The Java editor on the right shows the code for 'FirstNameField' extending 'AbstractStringField'. An orange arrow and the number '1' point to the code. A 'Person' dialog box is overlaid on the right, showing a form with fields for Picture URL, Picture, First Name (with an asterisk), Last Name, Company, Headline, Location, and Date of Birth. The dialog has 'Ok' and 'Abbrechen' buttons.

„First Name“ im Scout Explorer

The screenshot displays the Scout Explorer IDE interface. On the left, the Package Explorer shows a project structure with a 'PersonForm (Person)' form. A red circle with the number '2' highlights this form. In the center, the Scout Object Properties panel is open for the 'FirstNameField (First Name)' widget. A red circle with the number '3' highlights the 'Mandatory' checkbox, which is checked. On the right, the code editor shows the Java code for the 'FirstNameField' class, which extends 'AbstractStringField'. A red circle with the number '1' highlights the 'protected boolean getConfiguredMandatory()' method, which returns 'true'. At the bottom right, a preview window titled 'Person' shows a form with various fields. A red circle with the number '1' highlights the 'First Name' field, which contains the text 'Alice' and has an asterisk next to it, indicating it is mandatory. The preview window also shows other fields like 'Picture URL', 'Last Name', 'Company', 'Headline', 'Location', and 'Date of Birth'.

```
catch (Exception e) {
    e.printStackTrace();
}

}

@Order(30.0)
public class FirstNameField extends AbstractStringField {

    @Override
    protected String getConfiguredLabel() {
        return TEXTS.get("FirstName");
    }

    @Override
    protected boolean getConfiguredMandatory() {
        return true;
    }
}

}

@Order(40.0)
public class L

    @Override
    protected String getConfiguredLabel() {
        return TEXTS.get("Last Name");
    }
}

}
```

Mussfeld in den Scout Object Properties

The screenshot shows the Eclipse IDE with the Scout Object Properties view open for the `FirstNameField (First Name)` widget. The view is divided into several sections:

- Appearance:** Includes a **Label** dropdown set to `First Na`.
- Layout:** Includes **Grid W** (1) and **Grid H** (1).
- Behavior:** Includes a checked **Mandatory** checkbox, **Multiline Text**, and **Wrap Text** checkboxes.
- Data:** Includes **Max Length** (4000).
- Operations:** Includes **Exec Init Field**, **Exec Validate Value**, and **Exec Changed Value** buttons.
- Advanced Properties** and **Advanced Operations** sections are also visible.

Four orange arrows with numbers 1, 2, 3, and 4 point to specific elements:

- 1:** Points to the `protected boolean getConfiguredMandatory()` method in the `PersonForm.java` source code.
- 2:** Points to the `PersonForm (Person)` widget in the Scout Explorer.
- 3:** Points to the `FirstNameField (First Name)` widget in the Scout Explorer.
- 4:** Points to the **Mandatory** checkbox in the Scout Object Properties view.

A preview window titled **Person** shows the form layout with the following fields:

- Picture URL:** `http://www.uergsel.de/uploads/Alice.png`
- Picture:** (Image placeholder)
- First Name:** `* Alice` (with an asterisk indicating mandatory)
- Last Name:** (Empty field)
- Detail:**
 - Company:** `Alice im Wunderland`
 - Headline:** `Im Wunderland`
 - Location:** `Daresbury, Halton, Cheshire, England`
 - Date of Birth:** `26.11.1865`

Buttons for **Show Map ...**, **Ok**, and **Abbrechen** are visible at the bottom of the preview window.

Zugehöriger Java Code

The screenshot displays the Eclipse IDE interface for a Scout project. The Scout Explorer on the left shows the project structure with a tree view. The Scout Object Properties view in the center shows the configuration for the `FirstNameField (First Name)` widget, including its appearance, layout, behavior, and data. The Java code editor on the right shows the implementation of `FirstNameField` extending `AbstractStringField`. A `Person` form instance is shown in the bottom right, with fields for Picture URL, Picture, First Name, Last Name, Company, Headline, Location, and Date of Birth.

2 Scout Explorer: Package Explorer showing the project structure, including `PersonForm (Person)`.

3 Scout Explorer: Package Explorer showing the project structure, including `PersonForm (Person)`.

4 Scout Object Properties: Properties view for `FirstNameField (First Name)`, showing `Mandatory` checked.

5 Scout Object Properties: Properties view for `FirstNameField (First Name)`, showing `Max Length` set to 400.

1 Java Code: `PersonForm.java` showing the implementation of `FirstNameField`.

Person Form Instance:

Field	Value
Picture URL	http://www.uergsel.de/uploads/Alice.png
Picture	
First Name	* Alice
Last Name	
Company	Alice im Wunderland
Headline	Im Wunderland
Location	Daresbury, Halton, Cheshire, England
Date of Birth	26.11.1865

Eclipse Scout Tooling

Scout SDK hilft und schränkt *NICHT* ein

Unter der Haube von Eclipse Scout:

- Java
- Eclipse Platform
- Scout SDK operiert direkt auf Java Code

Zusammenfassung

Effiziente Entwicklung von (mobilen) Geschäftsapplikationen

- Entwickler arbeiten mit einer Codebasis
- Zur Laufzeit wird das GUI auf dem Endgerät dargestellt
- Separate Optimierung für Mobile und Desktop möglich
- Eclipse Scout ist Open Source

Effiziente Entwicklung von (mobilen) Geschäftsapplikationen

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- Eclipse Scout ist Open Source

Scout runterladen

Tutorial ausprobieren

Fragen im Forum stellen

Vielen Dank.

Matthias Zimmermann

Reserve Slides

Scout ist Eclipse Projekt

The screenshot shows a web browser window with the address bar at `eclipse.org/scout/`. The page features the Eclipse logo and a navigation menu with links for Home, Downloads, Users, Members, Committers, Resources, Projects, and About Us. A search bar is also present. The main content area has an orange header with the Eclipse Scout logo and the text "Eclipse Scout Business application framework". Below this, there are three buttons: "DOWNLOAD", "READ", "ASK", and "ENGAGE". The main content area is divided into three columns: "Simple", "Stable", and "Flexible", each with a brief description and a "DOWNLOAD" button. A "Current Status" section and a "News" section are also visible. The footer contains links for Home, Privacy Policy, Terms of Use, Copyright Agent, Legal, and Contact Us, along with a copyright notice for 2012 The Eclipse Foundation.

Eclipse Scout - Project Home

`eclipse.org/scout/`

Visit other Eclipse Sites

Home Downloads Users Members Committers Resources Projects About Us

Google Custom Search Search

Eclipse Scout

Business application framework

DOWNLOAD

READ

ASK

ENGAGE

Eclipse Scout is a mature and open framework for modern, service oriented business applications. It substantially boosts developer productivity and is simple to learn. [Learn more >>](#)

Simple

Looking for an application framework where you really get what you see? Then you might really like to have a look at the [Eclipse Scout Screencasts >>](#)

Stable

Searching for an application framework that surprises you with reliability, and not with bugs and error messages? Welcome to the [Eclipse Scout download >>](#)

Flexible

Dreaming of an application framework that combines easy learning with powerful adapting? Why don't you check out our [Eclipse Scout tutorial >>](#)

Current Status

Read more [about this project](#) and get all useful information and links about it in a nutshell.

News

Our [blog](#) is pushing out information to you:
You can also [follow us on Twitter](#).


Home Privacy Policy Terms of Use Copyright Agent Legal Contact Us

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200'000 Downloads

The screenshot shows the Eclipse Downloads website. At the top, there is a banner for "eclipseCON EUROPE 2012" with the text "Thanks for a great conference!". Below this is a navigation menu with links for Home, Downloads, Users, Members, Committers, Resources, Projects, and About Us. A search bar is also present. The main content area is titled "Eclipse Downloads" and features a dropdown menu for "Eclipse Juno (4.2) SR1 Packages for Windows". Under this menu, two packages are listed: "Eclipse IDE for Java EE Developers, 221 MB" (Downloaded 1,053,101 Times) and "Eclipse Classic 4.2.1, 183 MB" (Downloaded 900,714 Times). To the right, there is an "Installing Eclipse" section with links for "Install Guide", "Compare/Combine Packages", "Known Issues", and "Updating Eclipse".

 **Eclipse for Scout Developers, 305 MB**
Downloaded 208,658 Times [Details](#)

 **Windows 32 Bit**
Windows 64 Bit

The screenshot shows the download page for "Eclipse for Scout Developers, 305 MB". It indicates it has been downloaded 73,450 times and provides links for "Windows 32 Bit" and "Windows 64 Bit". Below the download information is an advertisement for "Eclipse 4 RCP Training" by Lars Vogel, with the website "www.vogella.com". The footer contains links for Home, Privacy Policy, Terms of Use, Copyright Agent, Legal, and Contact Us, along with the copyright notice: "Copyright © 2012 The Eclipse Foundation. All Rights Reserved."

Tutorials

The screenshot shows a web browser window with the URL `wiki.eclipse.org/Scout/Tutorial`. The page title is "Scout/Tutorial/3.8" and it is a redirect from the previous page. The main content area is titled "Eclipse Scout Tutorials" and lists several tutorial topics, each with a brief description and a document icon. On the right side, there is a navigation menu with sections for "Scout", "Community", and "Bugzilla". On the left side, there is a sidebar with a "Main Page" section and a "Toolbox" section.

Scout/Tutorial/3.8
< Scout | Tutorial
(Redirected from Scout/Tutorial)

Eclipse Scout Tutorials

- Get started with a simple 'Hello World'**
New to Eclipse Scout? Get started by creating a simple hello world application.
- Create a Scout application**
This is a step-by-step tutorial to learn about the main principles of Scout.
In the course of this tutorial you will develop a simple client-server application with some pages and forms.
- Permissions: Authentication and Authorization**
This tutorial builds upon the application created in the tutorial above. It explains how to work with permissions. Build a user administration outline, work with permissions and security filters.
- Table Field**
This tutorial builds upon the application created in the tutorial above. It shows how to add a table to a form.
- Integrate IMAP into your Scout application**
Learn how to integrate IMAP into your Scout application to access your mailbox.
- Deploy a Scout application**
Learn how to deploy a Scout application to Tomcat application server.
- Webservices with JAX-WS**
Learn how to integrate JAX-WS into your Scout application by creating a webservice consumer and provider.
- SVG Field**
Learn how to use SVG (Scalable Vector Graphics) to display interactive diagrams and graphics that work on desktop as well as on web environment.

Scout
Wiki Home
Website [↗](#)
Download [↗](#) • Git [↗](#)

Community
Forums [↗](#) • Blog [↗](#) • Twitter [↗](#)

Bugzilla
Bugzilla [↗](#)

Main Page
Community
portal
Current events
Recent changes
Random page
Help

Toolbox
What links here
Related changes
Upload file
Special pages
Printable version
Permanent link

Scout Forum

The screenshot shows the Eclipse Community Forums website. The browser address bar displays `www.eclipse.org/forums/index.php?t=thread&frm_id=174`. The page features a navigation menu with links for Home, Downloads, Users, Members, Committers, Resources, Projects, and About Us. A search bar is located in the top right corner. Below the navigation, there are links for Search, Help, Register, Login, and Home. The main content area displays a list of forum topics with columns for Topic, Replies, Views, and Last message.

Topic	Replies	Views	Last message
Rayo & rap support with Scout 3.9.0 Milestone 4 By: Urs Beeli on Thu, 24 January 2013	0	117	Thu, 24 January 2013 03:10 By: Urs Beeli
How to use SnapBox By: Urs Beeli on Thu, 17 January 2013	9	2729	Thu, 24 January 2013 03:07 By: Urs Beeli
Differences between date fields DateField, DateTimeField, UTCTextField By: Urs Beeli on Thu, 17 January 2013	7	2075	Thu, 24 January 2013 02:43 By: Arthur vD
MessageBox dimensions By: Stathis Alexopoulos on Sun, 20 January 2013	2	565	Thu, 24 January 2013 02:14 By: Beat Schwarzentrub
How to switch outlines with SWT By: Urs Beeli on Mon, 21 January 2013	5	1464	Wed, 23 January 2013 05:08 By: Urs Beeli
Adding scrollbars to forms... ...or disabling the possibility to resize a form window By: Urs Beeli on Mon, 21 January 2013	4	1685	Wed, 23 January 2013 04:09 By: Urs Beeli
Problems refreshing a form-on-a-page By: Urs Beeli on Mon, 21 January 2013	2	1878	Wed, 23 January 2013 02:24 By: Urs Beeli
How to create a page that contains a form instead of a table? Am I on the right track with my code? By: Urs Beeli on Thu, 17 January 2013	8	2409	Wed, 23 January 2013 02:15 By: Urs Beeli
extension point for custom columns How to configure the extension point for a derived column type By: Thomas Mangold on Tue, 22 January 2013	1	332	Tue, 22 January 2013 15:25 By: Beat Schwarzentrub
Database autorisation using DataSourceSecurityFilter By: Wouter van Veen on Mon, 21 January 2013	2	1027	Tue, 22 January 2013 13:20 By: Wouter van Veen
custom table By: Urs Beeli on Thu, 17 January 2013	0	0	Tue, 22 January 2013 11:48

Links

Twitter

[@EclipseScout](#)

Project

<http://www.eclipse.org/scout>

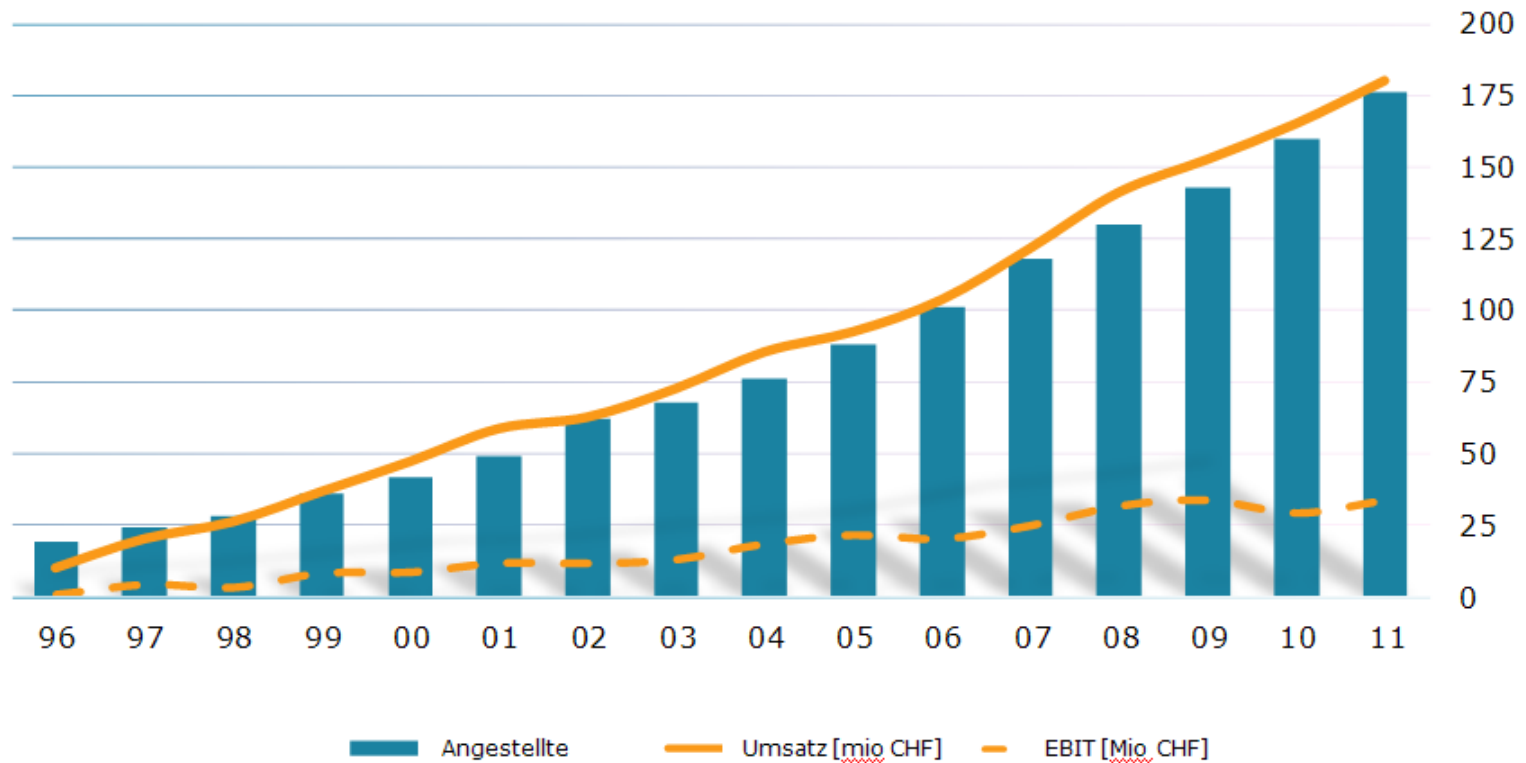
Forum

<http://www.eclipse.org/forums/eclipse.scout>

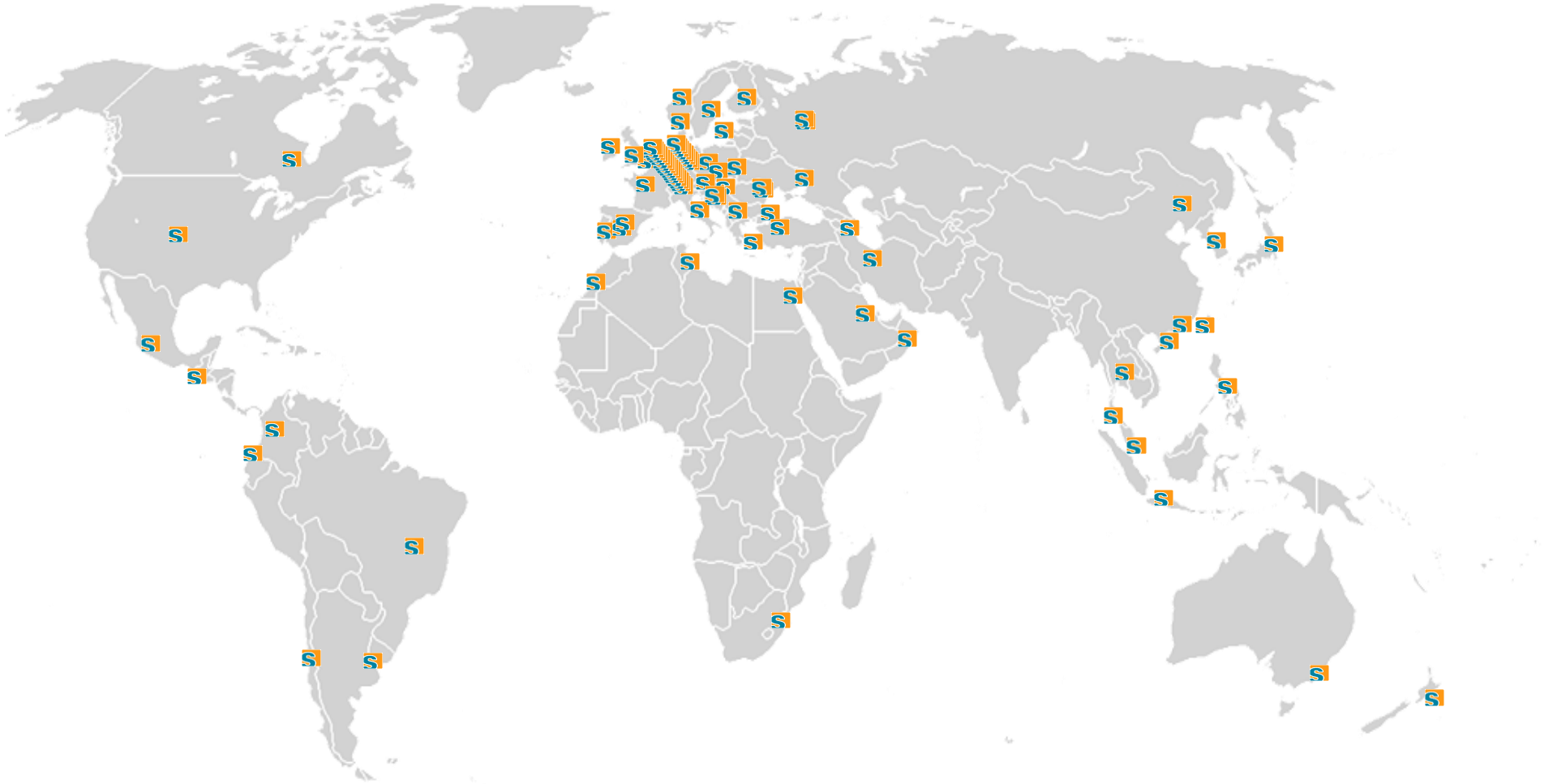
Blog

<http://www.bsiag.com/scout>

BSI Business Systems Integration AG



Eclipse Scout Deployments von BSI



CRM/Callcenter Kunden von BSI

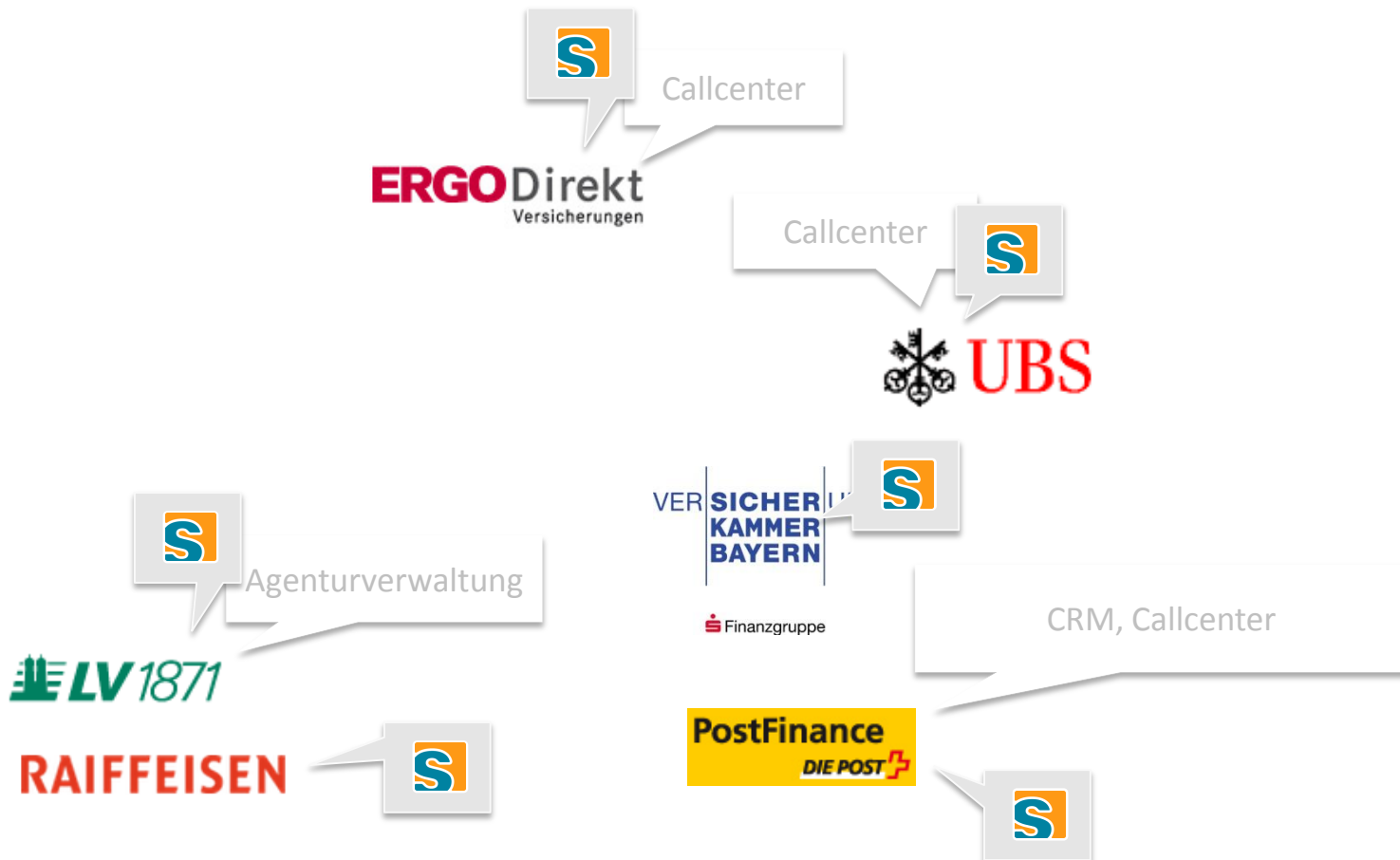
Viseca Card Services SA



Finanzgruppe



Eclipse Scout Kunden von BSI



Eclipse Scout „Tomorrow“

