

**Tom Schindl**

Tom.schindl@bestsolution.at  
<http://www.bestsolution.at>  
<http://tomsondev.bestsolution.at>

**Innsbruck, Austria**

# e4 - The platform of the future

---

**Eclipse Summit Europe  
Wednesday, October 27, 2009**

---

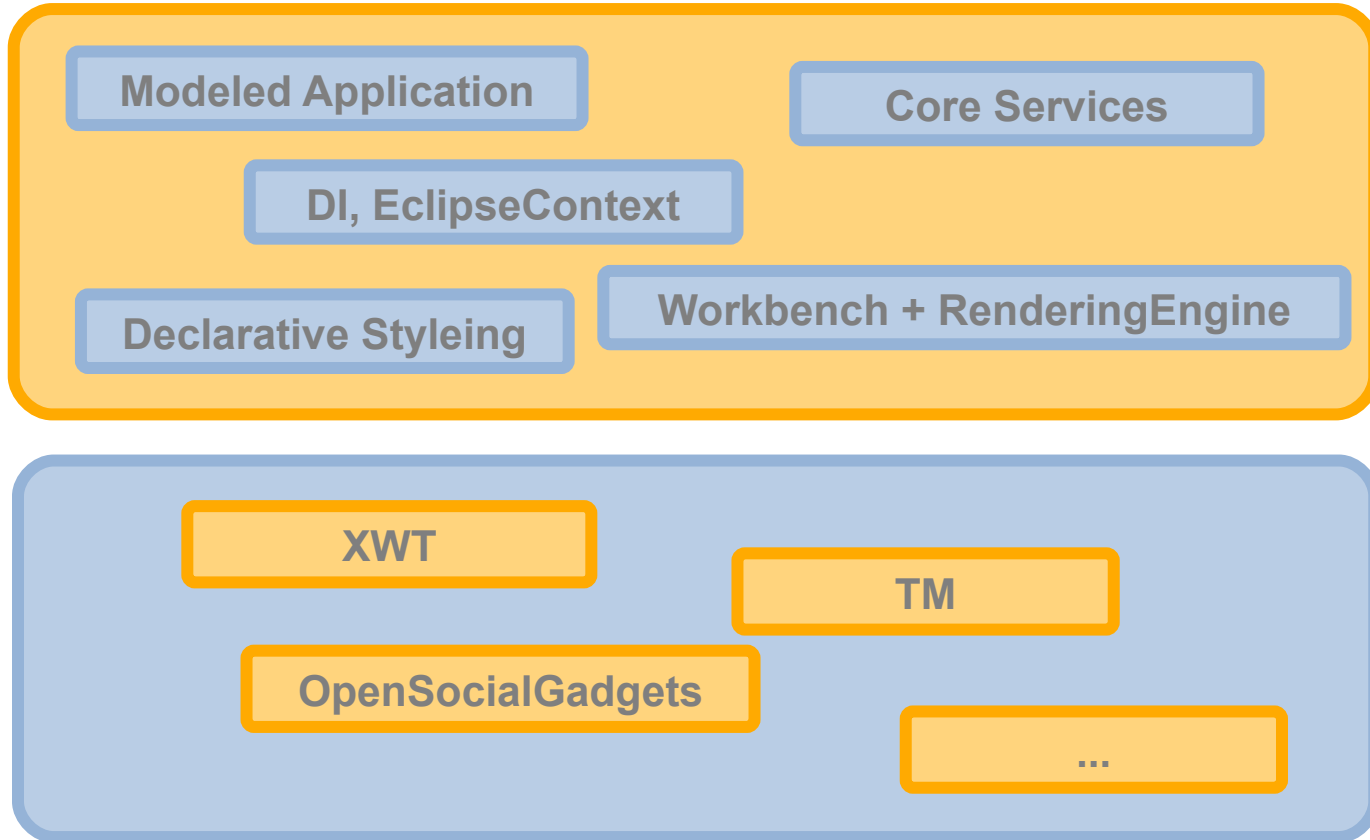
# e4 – About Me

- **Founder and Owner of BestSolution.at**
- **Eclipse Committer**
  - e4
  - Platform UI
  - EMF
- **Projectlead**
  - Nebula
  - UFaceKit

# e4 – The model a short history

- **EclipseCon 08**
- **First Prototype**
  - May 20<sup>th</sup> 2008: Mail to e4-dev „A radical approach to explore new paths for e4“
    - Platform designed from Scratch
    - Based upon an EMF-Application-Model
    - No statics, no singletons, usage of DI
    - Based on OSGi-Services

# e4 – Component Overview

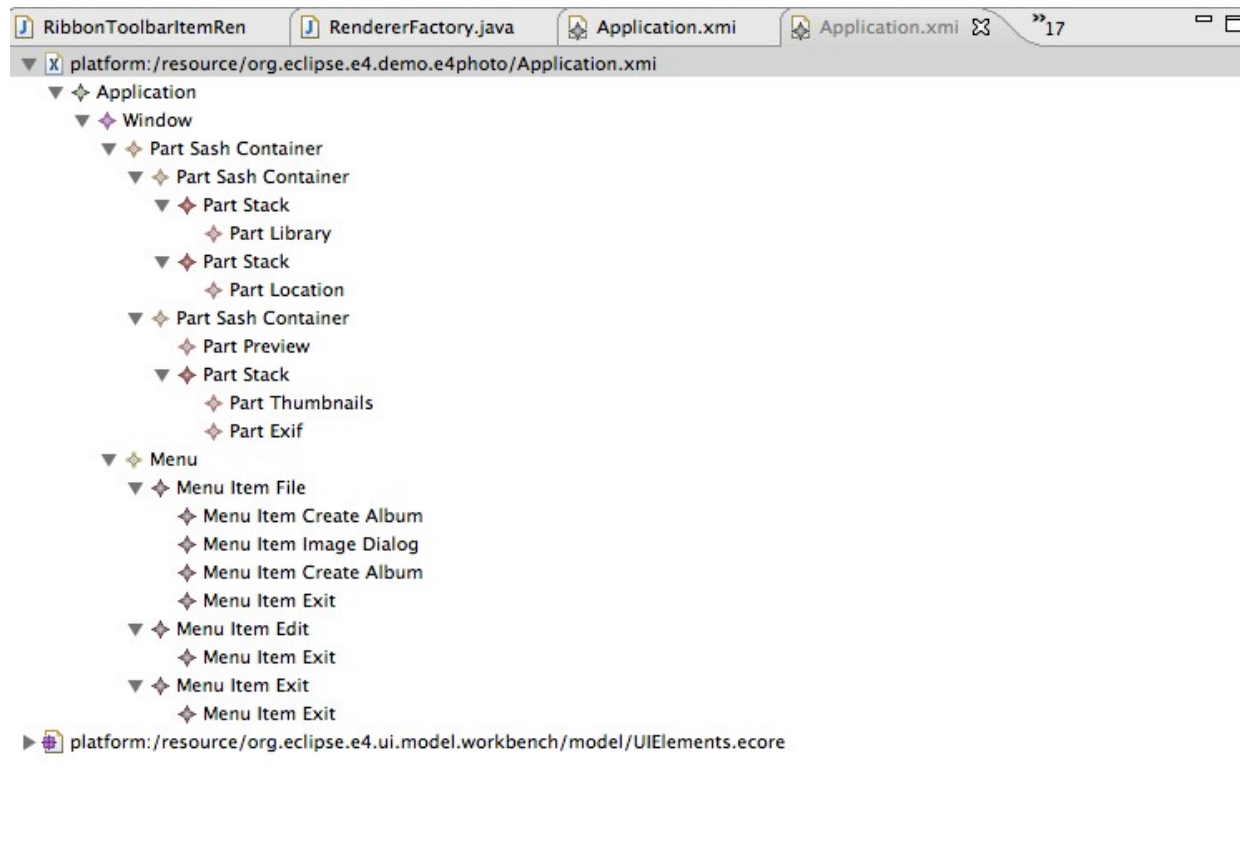


# e4 – Anatomie of an E4-App

- **Main Building Blocks**
  - Application model instance
  - POJO to fill the parts of the UI with content
- **Additional Building Blocks**
  - CSS – Theming your application
  - IEclipseContext – Accessing services, ...

# e4 – Anatomie of an E4-App

## ■ Application model



# e4 – Anatomie of an E4-App

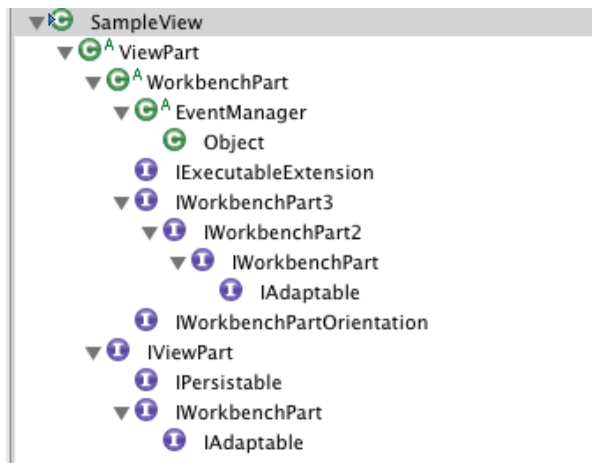
## ■ Part POJO

```
public class Preview {  
    public Preview(Composite parent, Realm workspace) {  
        // Create UI ...  
    }  
  
    @In  
    public void setSelection(final IFile input) {  
        // React on Selection Changes  
    }  
}
```

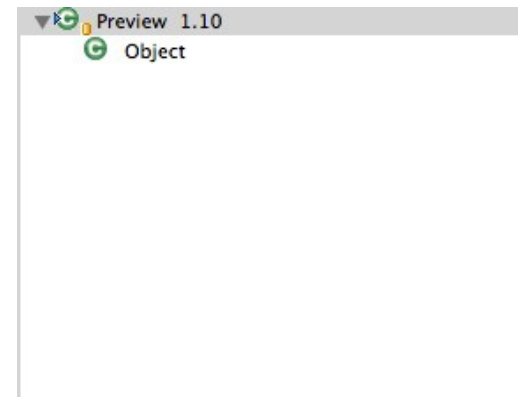
# e4 – Anatomie of an E4-App

- DI to flatten the Hierarchy

3.x



e4



# e4 – Anatomie of an E4-App

- **Wiring the part POJO into the Application Model**

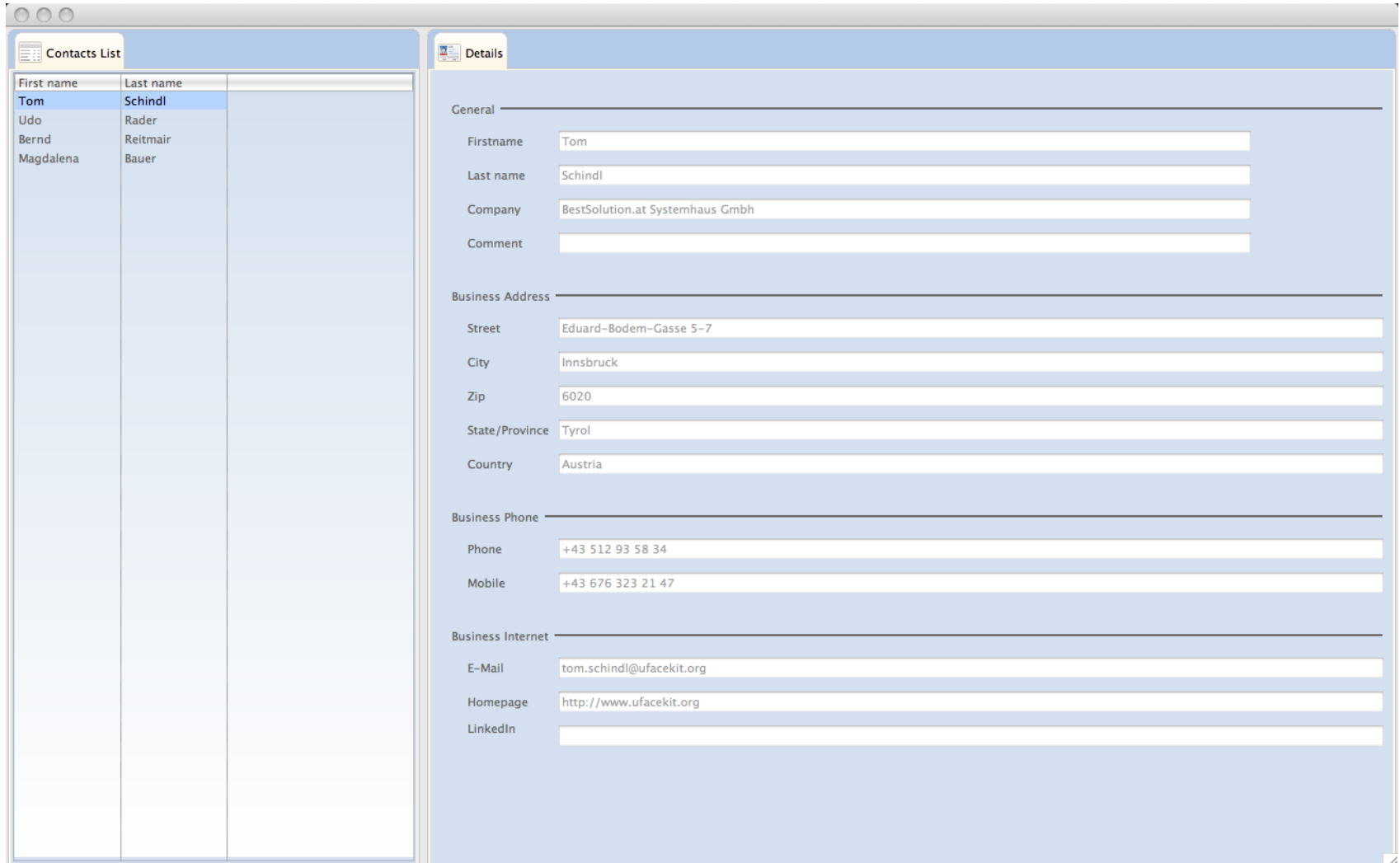
The screenshot shows the Eclipse IDE interface. The Outline view on the left displays the following tree structure:

- Application
  - Window
    - Part Sash Container
      - Part Sash Container
        - Part Stack
          - Part Library

The Properties view at the bottom shows the following table:

Property	Value
Context	
Factory	
Icon URI	
Id	
Menus	
Name	Library
Object	
Parent	Part Stack
Persisted State	
Toolbar	
Tooltip	
URI	platform:/plugin/org.eclipse.e4.demo.e4photo/org.eclipse.e4.demo.e4photo.Library
Variables	
Visible	true
Widget	

# e4 – Example Application



The screenshot displays a web application interface with two main panels. The left panel, titled 'Contacts List', contains a table with two columns: 'First name' and 'Last name'. The right panel, titled 'Details', shows a form for the selected contact, Tom Schindl, with various fields for personal and business information.

First name	Last name
Tom	Schindl
Udo	Rader
Bernd	Reitmair
Magdalena	Bauer

**Details**

**General**

Firstname: Tom  
 Last name: Schindl  
 Company: BestSolution.at Systemhaus Gmbh  
 Comment:

**Business Address**

Street: Eduard-Bodem-Gasse 5-7  
 City: Innsbruck  
 Zip: 6020  
 State/Province: Tyrol  
 Country: Austria

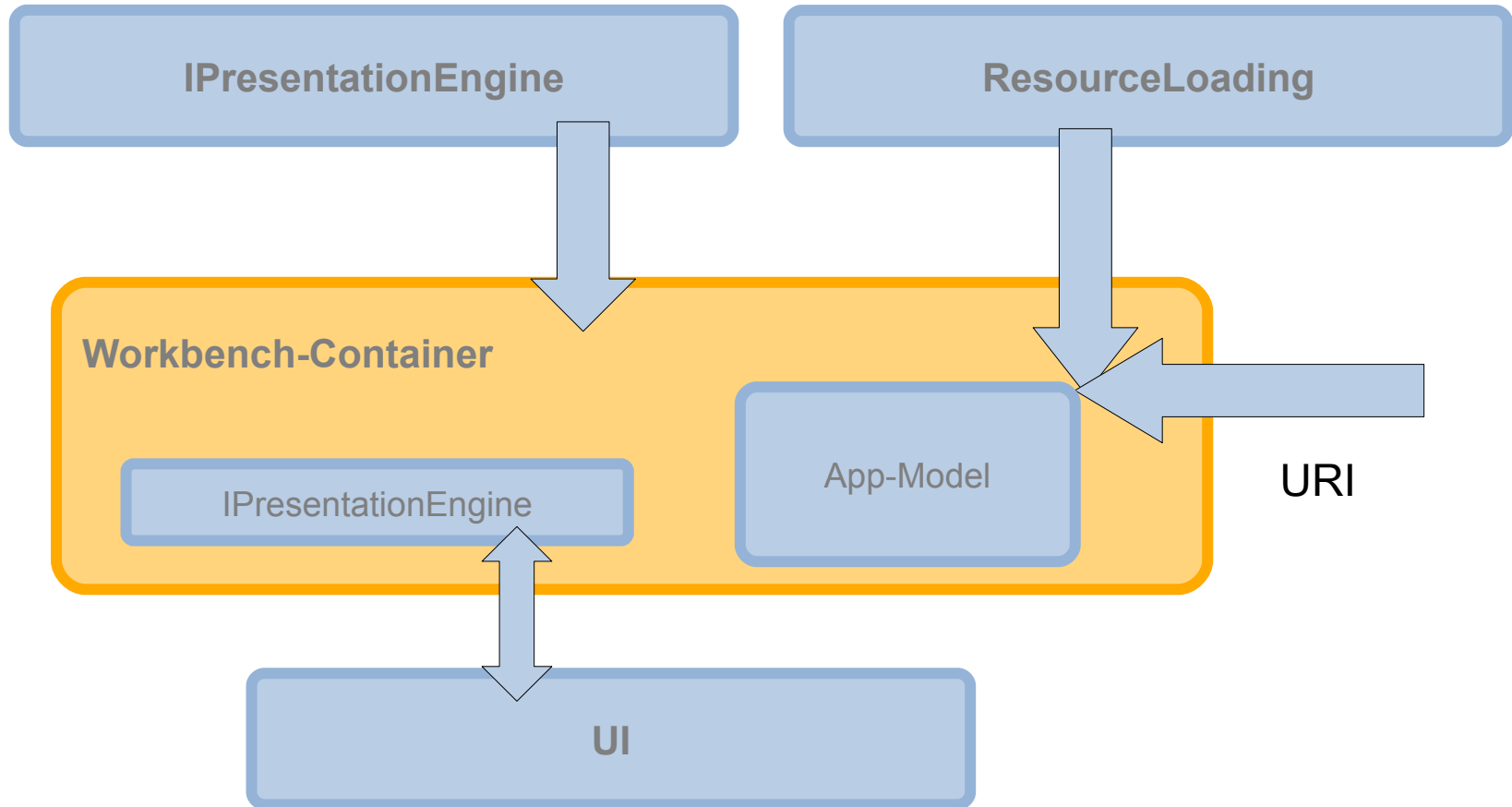
**Business Phone**

Phone: +43 512 93 58 34  
 Mobile: +43 676 323 21 47

**Business Internet**

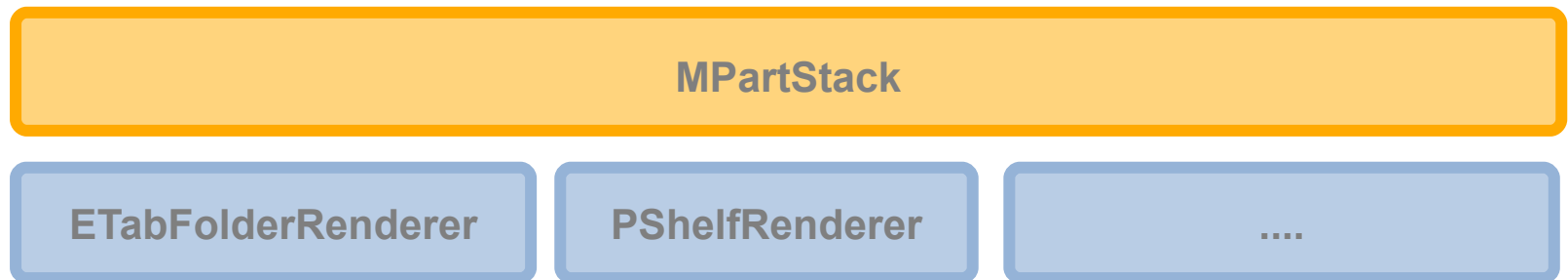
E-Mail: tom.schindl@ufacekit.org  
 Homepage: http://www.ufacekit.org  
 LinkedIn:

# e4 – Everything is a service



# e4 – SWT Renderer

- **Default Presentation Engine provided by E4**
  - Based on SWT
  - Extensible by plug in your own renderers
- **One Appmodel Element multiple renderers**



# e4 – SWT Renderer

## ▪ Enhancing the renderers

The screenshot displays a graphical user interface with two main panels. The left panel, titled 'Contacts List', contains a table with two columns: 'First name' and 'Last name'. The right panel, titled 'Details', shows a form for editing contact information, organized into sections: General, Business Address, Business Phone, and Business Internet.

First name	Last name
Tom	Schindl
Udo	Rader
Bernd	Reitmair
Magdalena	Bauer

**Details**

**General**

Firstname: Tom  
 Last name: Schindl  
 Company: BestSolution.at Systemhaus Gmbh  
 Comment:

**Business Address**

Street: Eduard-Bodem-Gasse 5-7  
 City: Innsbruck  
 Zip: 6020  
 State/Province: Tyrol  
 Country: Austria

**Business Phone**

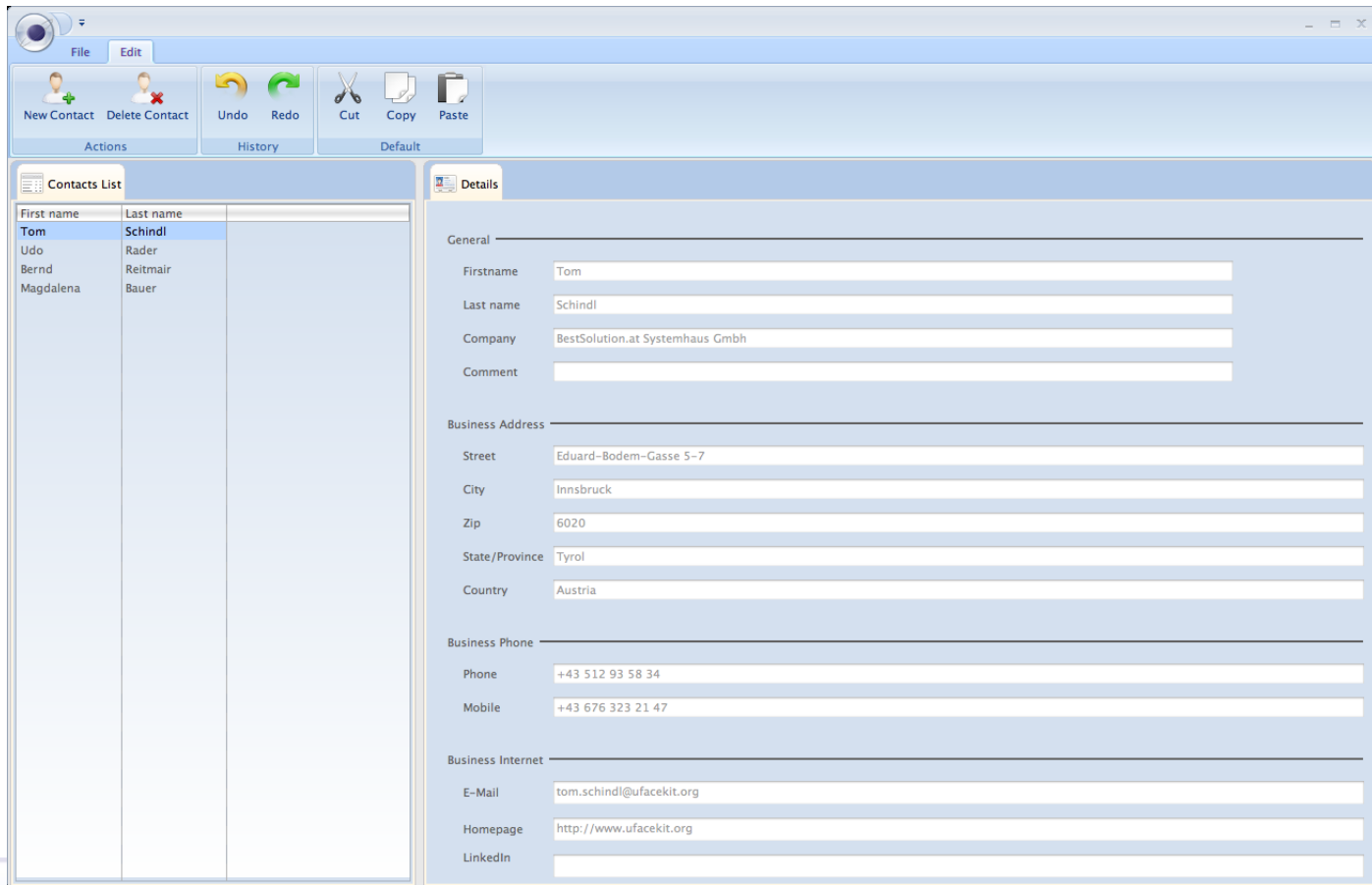
Phone: +43 512 93 58 34  
 Mobile: +43 676 323 21 47

**Business Internet**

E-Mail: tom.schindl@ufacekit.org  
 Homepage: http://www.ufacekit.org  
 LinkedIn:

# e4 – SWT Renderer

## ▪ Enhancing the renderers



# e4 – Open Social Gadgets

## ▪ What are OpenSocialGadgets

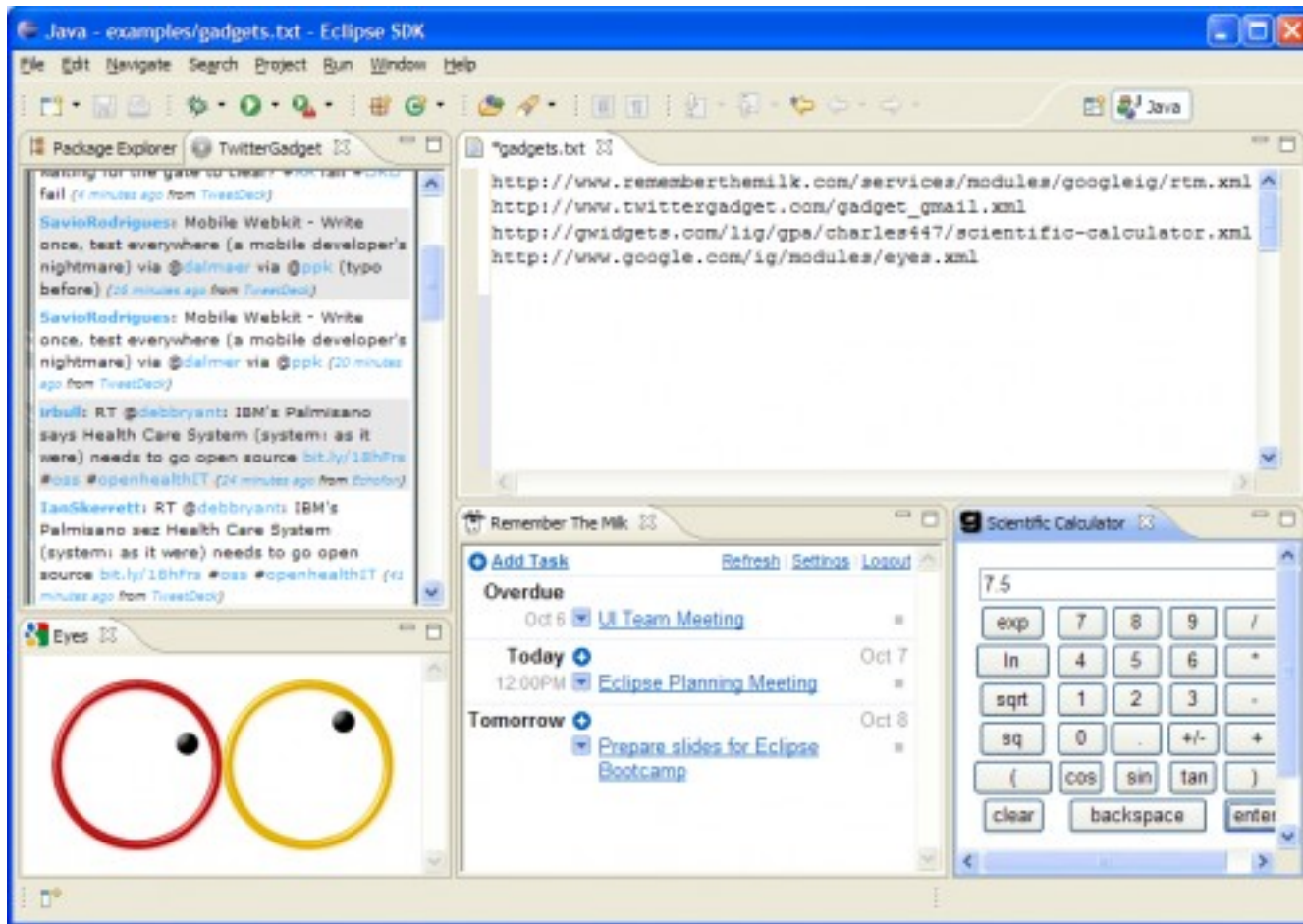
Gadgets are web-based software components based on HTML, CSS, and JavaScript.

## ▪ Open Eclipse for a new set of developers

## ▪ Examples

- Remember the Milk <http://www.rememberthemilk.com>
- Twitter Gadget
- ...

# e4 – Open Social Gadgets



e4 – The platform of the future

© 2009 by Tom Schindl, Innsbruck, Austria. Made available under the EPL v1.0

# e4 – Additional Areas

- **XWT**
  - Based upon XAML concepts
  - Provides Visual Designers
- **TM**
  - Modeled UI exploration
- **Language support**
  - Write bundles e.g. in JavaScript

**THE END**