Christian Campo
Eclipse Application Developer Day - July 2009
Riena Goals

- Client / Server Apps (Distributed Components)
- Based on OSGi / Equinox
- Built on top of RCP
- „Enterprise ready“
- Enduser focused Navigation Concept
- Service Oriented
Riena Architecture
Riena Features

- **Distributed Enterprise Applications**
  - Remote OSGi Service based on Webservice model

- **Enhanced UI Model based on RCP**
  - Based on RCP but with a different look and navigation model (enduser focused)
  - Separation between controller/view using Ridget API
  - Validator, Converters, Markers
  - UI Filters

- **Riena Core**
  - Injector for services and extensions

- **Security**
  - Using equinox security
  - supports authentication and authorization (client and server)

- **Object Transaction**
  - follows object net modifications in a distributed environment

- **Client Monitoring**
  - transfer logs, statistics etc from client to server
Riena UI - Goals

- **Reuse** Eclipse Technology
  - Workbench
  - Views
  - JFace
- Riena’s **Navigation Model** on top of Eclipse RCP
- **Separate** Controller and View using Ridgets
- Advanced UI Functions for Business Apps
## Riena UI - Vision

![Screenshot of the Riena UI](image)

### DVAG Online-System

#### Version

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Eclipse RCP (samples)
Riena Navigation Model/Processor

- **Tree based** Model
- **Building blocks** are at runtime
  - extensions („assemblies“)
  - nodeBuilders (java code)
- **Multiple instances** per building block possible (i.e. multiple customer records)
- **Navigate from any give node** in the tree to any other node using a simple id
- **Pass parameter**, supply feedback with changelistseners
- **Generic Processor** included to manage the tree
Riena Navigation Model

Application
Subapplication …
Modulegroup ...
Module ...
Submodule …

![Riena Navigation Model Diagram](image)
Riena with „RCP Glasses“

- Perspective
- Coolbars
- RCP View owned by Riena, driven by the Navigation Model
- RCP Views
Demo
Model • View • Controller
Separation of View and Controller

ViewPart

View

Controller

Model

updates

events

state

data binding
Riena - Ridgets

View

uiControls

Widget

Controller

inject

Ridget

Model

Mapping

BindingManager

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Riena - Ridgets

- View
  - Widget
    - uiControls
  - Ridget
    - uiControl
    - bound to

- Controller
  - ridgets

- Model
  - IObervable or JavaBean
  - configure
  - data binding
UI Filters

- Restrict
  - Ridgets
  - Navigation
  - Validation

- undoable

- accumulate-able

- Driven by (application specific)
  - Permissions
  - Workflow
  - Businessrules
UI – Detached Views

Main Window

Detached View One

Detached View Two
Riena L&F and Theming

- Colors, Fonts
- Renders for Navigation
- Icons, Logos
Riena UI – Vision - statusquo
Experiment – SWT Platform on QT

Riena Client  SWT Client

RCP

Equinox  SWT

QT Jambi

QT

QPushButton {
    border: 1px solid #8993b2;
    border-radius: 3px;
    background-color: qlineargradient(x1 : 0, y1 : 0, x2 : 0, y2 : 1, stop : 1 #c5cae6, stop : 0 #fcfcfe);
    min-width: 80px;
    height: 20 px;
}

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Experiment - Result
Riena

- Enterprise Client / Server Apps
- Navigation Concept on top of Eclipse technology
- Separation of View and Controller using Ridgets
- Ease the use of databinding by simplified APIs in ridgets
- Features next version
  - Full keyboard navigation
  - Custom modules in the navigation bar
  - Extend the flexibility of the workarea
  - Additional remote service features
Riena

- http://www.eclipse.org/riena
- http://wiki.eclipse.org/Riena_Project
- riena-dev@eclipse.org