

5.– 8. September 2011
in Nürnberg



Herbstcampus

Wissenstransfer
par excellence

Geh weg, bleib da

Mehrschichtige Web-Anwendungen mit jQuery und REST

Werner Eberling

MATHEMA Software GmbH

Das Szenario



Randbedingungen

- Lauffähig auf verschiedenen Systemen



**Windows
Mobile™**

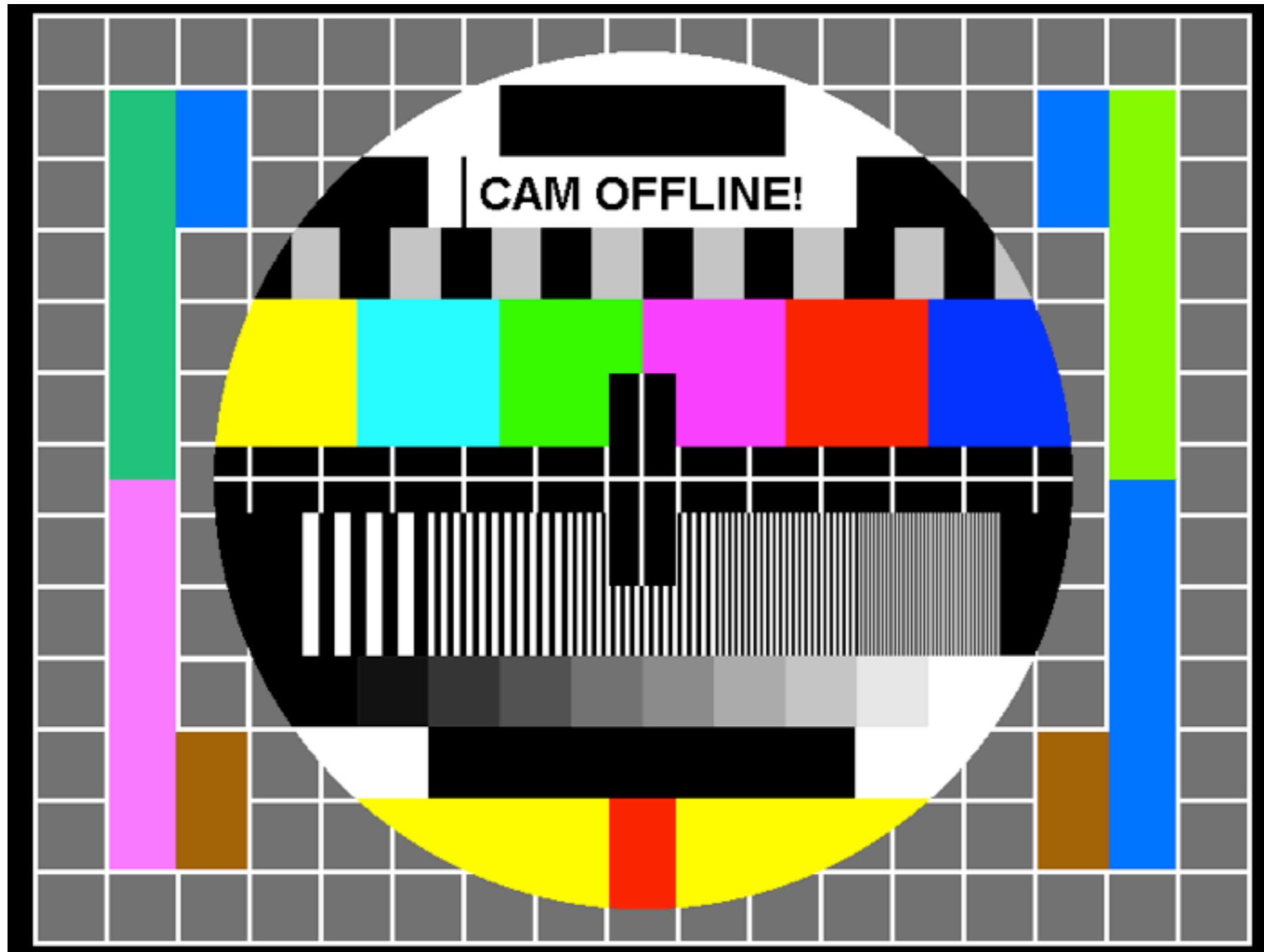


Windows® 7

One-Size-Fits-All?



Noch mehr Randbedingungen



Der etwas andere Rich-Client



Oh Gott, JAVASCRIPT!!!!!!



JavaScript, aber unaufdringlich



Struktur

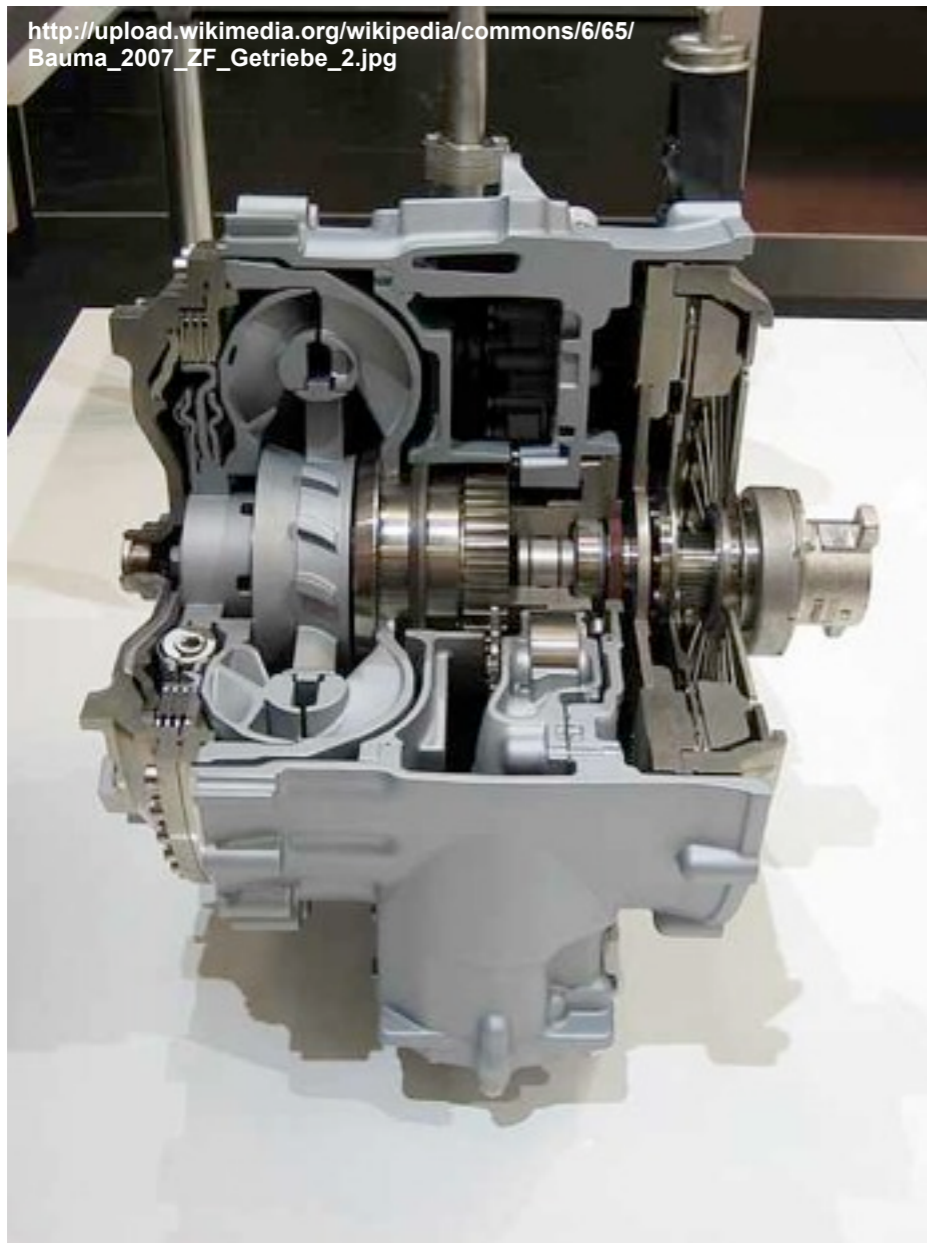
```
<html>
  <head>
    <link rel="stylesheet" href="css/addressbuch.css" type="text/css" />
    <script type="text/javascript" src="js/jquery-1.5.2.js"></script>
    <script type="text/javascript" src="js/json2.js"></script>
    <script type="text/javascript" src="js/addressbuch.js"></script>
  </head>
  <body>
    <div id="header">
      <h1>Adressbuch</h1>
    </div>
    <div id="sliderFrame">
      <div id="left" class="slide">
        <div id="adresses" class="content">
          </div>
        <div class="buttons">
          <input id="reloadBtn" type="submit" value="Neu laden"></input>
          <input type="submit" class="slideBtn" value="Neue Adresse"></input>
        </div>
      </div>
      <!-- ... -->
    </body>
  </html>
```

Style

```
.adrContent {  
  overflow: hidden;  
  white-space: nowrap;  
  padding: 5px 0px 10px 10px;  
}  
  
.slide {  
  position: absolute;  
  height: 100%;  
  width: 100%;  
}  
  
.hideLeft {  
  left: 100%;  
}  
  
.hideRight {  
  left: 100%;  
}  
  
#sliderFrame {  
  position: relative;  
  height: 95%;  
  width: 100%;  
  overflow: hidden  
}
```



Funktionalität

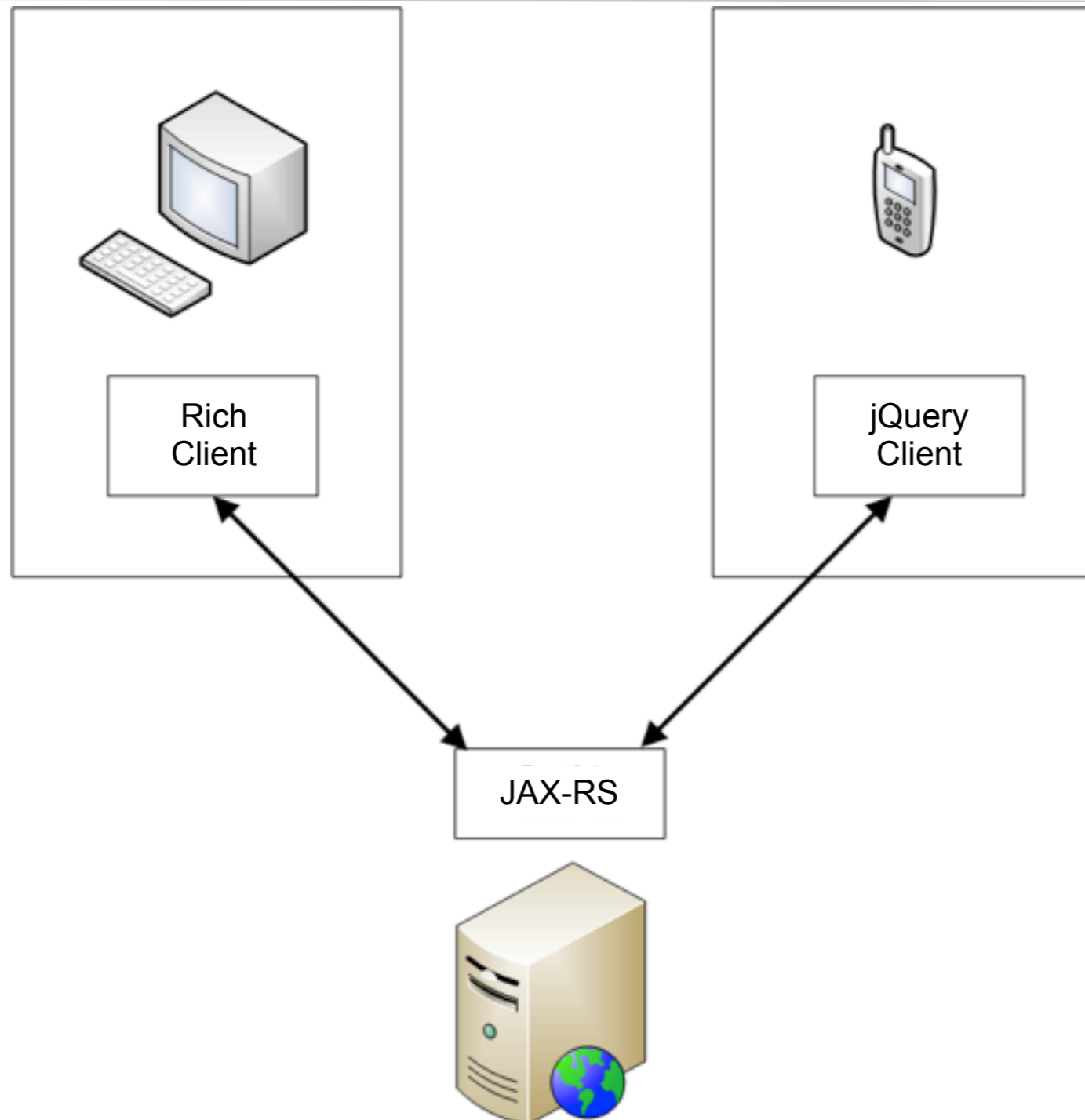


```
$(document).ready(function(){
    load();
    initUpdateReplay();
    $('input[type="submit"]').addClass('button');
    $('#left .slideBtn').click(slideAllLeft);
    $('#right .slideBtn').click(slideAllRight);
    $('#reloadBtn').click(load);
    $('#saveBtn').click(
        function(){
            addAdresse();
            clearNewAdresse();
        });
});

function initAdressbuch(){
    sortAdressen();
    var adressenDiv = $('#adressen');
    buildAdressenMarkup(adressenDiv);
    registerAdressenOnClickHandlers(adressenDiv);
};

//...
```

Bereit für verschiedene Client-Lösungen



Restful Services mit JAX-RS

```
@javax.persistence.Entity  
@javax.xml.bind.annotation.XmlRootElement  
public class Adresse { ... }
```

```
@javax.ejb.Local  
@javax.ws.rs.Path("adressen")  
public interface Adressbuch {  
  
    @javax.ws.rs.GET  
    @javax.ws.rs.Produces("application/json")  
    public List<Adresse> getAll();  
  
    @javax.ws.rs.POST  
    @javax.ws.rs.Consumes("application/json")  
    @javax.ws.rs.Produces("application/json")  
    public Adresse addAdresse(Adresse adresse);  
  
    //...  
}
```

```
@Stateless  
public class AdressbuchImpl implements Adressbuch { ... }
```

WebService Aufruf mit JS

Plugin
vs.
pure AJAX-call

```
function load(){
  $.ajax({
    type: "GET",
    url: "adressen",
    success: function(data){
      adressen = data;
      initAdressbuch();
    }
  });
}

function save(data){
  $.ajax({
    type: "POST",
    url: "adressen",
    contentType: "application/json",
    data: JSON.stringify(data),
    success: function(retVal){
      data.id = retVal.id;
    },
    error: function(){
      updateCache.push(data);
    }
  });
}
```

Weitere Schlagwörter zur Diskussion

HATEOAS

http vs. https

Browser

...

Caching

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Vielen Dank!

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