

*Including
Content Server
14.1.8*

Reiner's smartUI 2 days basic Workshop Agenda for Content Server 16.x.y and later

The screenshot shows the OpenText Content Server smartUI interface. At the top, the header includes the OpenText logo and 'Content Server', along with search, star, and user icons. The main content area is a dashboard with several widgets:

- Good afternoon!**: A large green banner with a play button icon and text: "As a foundational technology in the Digital Workplace, OpenText Content Suite 16 will pave the way to personal productivity, seamless collaboration, and integration with business processes."
- Recently Accessed**: A list of documents including "a test doc", "Text", and "Datenschutzerklärung en.docx".
- Favorites**: A list containing "a test doc".
- Connected Work...**: A sidebar menu with options for "Enterprise" and "Admin Home".
- Query SAP**: A form with fields for "Creation Date" (set to "Past 2 Weeks"), "SAP:start_of_retention", and "SAP:compulsory_destruction_date", with a "Search" button.
- My Assignments**: A list of tasks including "Assist purchase dept" and "Write tech specs".
- My External S...**: A list of sharing options including "Shared with others" and "Shared with me".

Reiner Merz

Agenda for the smartUI Workshop basic 2
days

Version 1.8 Reiner Merz

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Content Server Smart UI Workshop Basic 2 days

Targets: Developers and Team Managers which want to have an understanding of the new GUI concepts used by Content Manager and

- It's possibilities
- The components and the frameworks involved
- The communication with CS using REST API
- The implementation of widgets on the client side using the SDK library
- The anatomy of a Content Server widget

After the workshop: Participants have an overview of the new GUI, on the REST API, can extend the REST API and have a basic understanding of the SDK and what can be done with the SDK

Length: 2 days, 470 foils.

Remark: This is not a Step-by-Step course. It's intended to be an overview and it is crucial to discuss all points. So, exercises are strictly time limited and it is not intended to repeat exercises unless time permitting.

The Required Knowledge Prerequisites must be met. If not, there will be no success in attending this workshop

Knowledge Center Access is required for all attendees to get the SDK.

Required Technical Prerequisites: Training VMs or customer VMs with Content Server 14.1. Internet Access to different URLs is required during the whole training.

Software levels: Level 14.1.8/14.0.x of the CSUI SDK is used on the client side, Content Server 14.1.8/14.0.x is used on the Content Server side.

Agenda

Day 1 (10:00-17:00)

Agenda. A short introduction to this agenda

Chapter 1

The different GUIs. The new smart GUI. How smartUI works. Setting up landing pages with the new GUI. Using Perspectives and build them with the Perspective Manager. Use Webreports to build custom widgets.

Limitations of smartUI.

Using widgets on another portal w/o content server.

Exercises:

- Build a custom perspective
- Build a custom widget based on a web report

Content:

- Chapter 1.1: The different UI Possibilities
 - Examples: Connected Workspaces
 - Examples: xECM
 - The Big Picture. See the GUI components in the Content Server Environment
 - The Toolbox: Functional Components of the smartUI SDK
- Chapter 1.2: smartUI Overview
- Chapter 1.4: Perspectives Overview
 - Scenario: Creating a new Perspective

Chapter 2

REST. What is REST? Overview of REST Services, Review of CSIDE. (*OpenText REST and Web Services Training, w/o Web services*)

REST. Consuming REST Services with Postman.

- (*Chapter 3 of the REST and Webservices Training*) Additional: Using REST in special situations where REST gets muddy, p.ex. Uploading a document with required categories or copy a node in JavaScript, c# and java. Tips and Tricks. Discuss performance aspects on using REST

Exercises:

- Use POSTMAN to get used to REST, Authenticate in REST
- Try several REST commands and get an overview over the various options
- Build a REST based html page, which queries a node

Extending REST Services.

How to build a new REST Service in OSCRIPT. (*Chapter 7 of the REST and Web services training*)

Exercises:

- Build a custom REST Service in a new Content Server Module.
 - Extending the REST API
 - Handling Requests with REST API

- RESTful object
- Create a module for REST extension
- REST API module in Content Server 16
- Resources, actions and prototypes
- Adding parameters to the prototype
- Test a new REST resource

Chapter 3

SDK Infrastructure Intro

Introduction to Infrastructure needed for the SDK. All components and frameworks will be introduced. Introduction to Backbone with a Tutorial, Marionette as the extension of Backbone is also covered by a tutorial.

Exercises:

- Backbone Tutorial. Building a browser-based TODO List
- Marionette Tutorial. Extending the TODO List with Marionette

Content:

- Chapter 3.1: Bootstrap
 - A CSS and JS framework as the base of smartUI
- Chapter 3.2: Node.JS
- Chapter 3.3: Require.js
 - How to use require.js.
 - Overview
- Chapter 3.4: Backbone.js
 - Views
 - Events
 - Models
 - Collections
 - Routers
 - Models and Views
 - Collections
 - View Rendering
 - Routing with URLs
 - A simple Backbone Tutorial
- Chapter 3.5: Marionette.js
 - Marionette Views - Layouts
 - Marionette Views - Regions
- Chapter 3.6: Handlebars.js
 - A html template framework
 - Handlebars SDK usage
- Chapter 3.7: Yeoman
- Chapter 3.8 Grunt.js
 - Tasks Configuration
 - Starting grunt
 - Some examples of GRUNT tasks
 - CSUI sdk custom grunt tasks
- Chapter 3.9 Additional Infrastructure
 - CORS – Cross Origin Resource Sharing Chrome Plugin
 - SVG viewer
 - Markdown

Chapter 4:

smartUI Intro BASIC

What is the SDK, Prerequisites, documentation? Download and install the SDK. Examine the structure. Style Overrides, an overview. We look at all framework homepages to find examples and documentation. Using fiddler to examine underlying functionality. What's possible with the SDK. Discussion of how to add new node types, new commands. Discussion of the controls and the widgets in the SDK (basic level).

Exercises:

- Find the SDK and download the SDK
- Install the SDK
- Build a Project Directory
- Prepare the Demo Widget “Hello”
- Install this in the CSIDE Module from Chapter 4
- Test this widget in the Perspective Manager

Content:

- 4.1 Introduction
- 4.2 Installing the SDK. Different Installations in 14.1.4 and 14.1.7.
- 4.3 Building the Demo Widget
- 4.4 CSS Style Overrides Binf (OpenText Bootstrap Version)
- 4.5 General Overview
 - General Overview
 - General Architecture, Coding Guidelines
 - Logging, Internationalization and Localization
- 4.6 Content of the SDK
- 4.7 Routing Preview (see adv. Training for a more detailed discussion)
- 4.8 New Command
- 4.9 Custom Column
- 4.10 Metadata
- 4.11 Define a new Nodetype
- 4.12 Create a Widget
- 4.13 Base Widgets. Detailed info's on base widgets.
 - Favorites
 - Recently Accessed
 - MyAssignments
 - Shortcut
 - Shortcuts
 - Metadata
 - NodesTable
 - DocumentOverview
 - Search Results
 - Permissions
 - Html.editor
 - Navigation Header
- 4.14 Controls and Contexts
 - Controls
 - Node Picker
 - Modal Alert
 - File Open
 - Perspectives: Grid, Single, Left-Center-Right, Tabbed, Tabbed-Flow

- Tile
- ListView
- ListItem
- Signin
- UserPicker
- Breadcrumbs
- Checkbox
- Dialog
- Disclosure
- Error
- Form
- Globalmessage
- Grid
- Zip&Download
- Integration Folder Browser
- Integration Target Picker
- 4.15 Models and Factories
 - NodeModel
 - Other Models
 - Factories
 - Fetchable Factory
 - Configurable Factory

Chapter 5

Mockup Data and Testing

MockJax is used to mock up data (no need for a Content Server during development of a widget) and the Jasmine Framework is used to for the testing of the widgets or other JavaScript modules

Content:

- Mocking Up Data
- MockJax
- Setup and Usage
- Jasmine Usage

Chapter 6

The anatomy of the myAssignment Widget. A detailed voyage in the source of the widget. (Explanation of all js files, the test folder, css and language settings)

Chapter 7: Build a custom Widget

Our First Widget.

Use the Hello Widget, modify it to call the REST Service build in the REST part. Modify this REST Service to provide a better JSON Structure.

Exercises:

- Modify the Hello-Widget. Add a model for our REST Service. Add a handlebar template to output our greetings from the server. Add some css effects

Content:

- Subdirectory Structure

- Some Changes to our REST Service
- Files to create
- Add mockup support, once the answer is clear defined
- Test with index.html
- Start „npm start “the local server in the dev folder
- Compile the new bundles file with grunt
- Install on Content-Server
- Open the perspective manager
- Problem with Chrome. Official Chrome BUG: (Issue 611328
<https://bugs.chromium.org/p/chromium/issues/detail?id=611328>)

References for further reading:

JavaScript

- “JavaScript Application Design “as a general introduction (covering Grunt) <https://www.manning.com/books/javascript-application-design>
- Stoyanow’s JavaScript patterns <http://shop.oreilly.com/product/9780596806767.do>
- Flanagan’s “JavaScript: The Definitive Guide” <http://shop.oreilly.com/product/9780596805531.do>
- Crockfords “JavaScript the good Parts” <http://shop.oreilly.com/product/9780596517748.do>
- Flanagan’s “JavaScript Pocket Reference” <http://shop.oreilly.com/product/0636920011460.do>

Bootstrap

- Spurlock: Bootstrap Responsive Web Development <http://shop.oreilly.com/product/0636920027867.do>
- Syed Fazle Rahman: Jump Start Bootstrap: Get Up to Speed with Bootstrap in a Weekend <https://www.amazon.com/gp/product/0992279437>
- Alan Forbes: The Joy of Bootstrap: A smarter way to learn the world's most popular web framework <https://www.amazon.com/gp/product/1522792813/>

RequireJS

- Greg Franko: Instant Dependency Management with RequireJS How-to <https://www.amazon.com/Instant-Dependency-Management-RequireJS-How/dp/1782169067>
- David Sulc: Structuring Backbone Code with RequireJS and Marionette Modules <https://leanpub.com/structuring-backbone-with-requirejs-and-marionette>

Backbone

- Developing Backbone.js Applications Adnan Osmani <http://shop.oreilly.com/product/0636920025344.do>
- Backbone.js Patterns and Best Practices Swarnendu De <https://www.amazon.com/Backbone-js-Patterns-Best-Practices-Swarnendu/dp/1783283572>
- Backbone.js Cookbook Vadim Mirgorod <http://shop.oreilly.com/product/9781782162728.do>
- Backbone.js Blueprints Andrew Burgess <http://shop.oreilly.com/product/9781783286997.do>

Backbone-Marionette

- Getting Started with Backbone Marionette Raymundo Armendariz, Arturo Soto <https://www.packtpub.com/web-development/getting-started-backbone-marionette>
- Backbone.Marionette.js: A Gentle Introduction David Sulc <https://leanpub.com/marionette-gentle-introduction>
- Backbone.Marionette.js: A Serious Progression David Sulc <https://leanpub.com/marionette-serious-progression>

MockJax and Jasmine

- Backbone.js Cookbook Vadim Mirgorod [https://www.packtpub.com/mapt/book/web_development/9781782162728 Chapter 8](https://www.packtpub.com/mapt/book/web_development/9781782162728_Chapter_8)
- KnockoutJS Essentials Jorge Ferrando <https://www.packtpub.com/application-development/knockoutjs-essentials>

- JavaScript Testing with Jasmine Eva Hahn
<https://www.safaribooksonline.com/library/view/javascript-testing-with/9781449356729/>

Content Server Trainings

- 4-0140 Content Server IDE (CSIDE) Fundamentals
- 971-301 Livelink ECM Enterprise Server Workflow Customization Fundamentals
- 03-0117/8 Webreports Design