

Release 2.1

After delivering Release 1.1 at 07th of January 2008, CaptainCasa now at 21st of July 2008 provides the second release of its User Interface Framework for server side Enterprise Applications.

Most significant development steps were based on the input of the 2nd Corporate Community Meeting held in April 2008 in Dortmund. Thanks again for giving us this level of input!

What's new?

First let us summarize what was done:

Big Points...

The big points are:

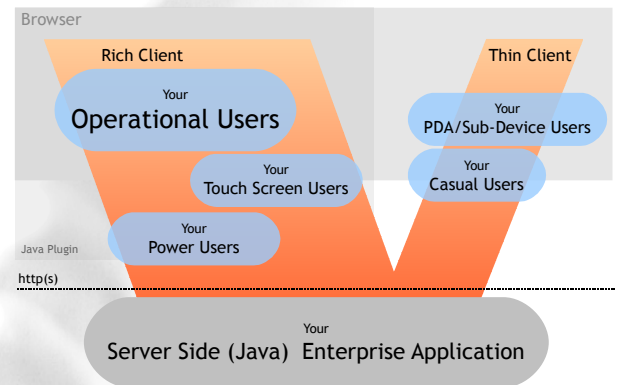
- HTML Renderer for HTML only scenarios.
- Jasper Reports support for viewing reports and printing reports.
- Support for drawing shapes to form diagrams in a flexible way.
- Touch Screen Components.
- Workplace Framework.
- Hot Deployment during Development.

...and what they really mean...

Before getting to more details too fast, let us check what the big picture is. With release 2.1 CaptainCasa Enterprise Client made significant steps to cover the typical needs of User Interface processing of operationally used Enterprise Applications:

- The **RICH CLIENT** was extended massively (reporting, diagrams, workplace).
- The area of simple pages for **THIN CLIENTS** (e.g. sub-devices, mobiles) now is covered by providing an HTML Renderer.
- The area of **TOUCH SCREEN CLIENTS** now is covered by providing adequate components.
- The area of **PRINTING** and **REPORTING** now is covered by a nice integration of Jasper Reports.

All these different issues are now supported within one consistent framework to be plugged to Java based, server side business application systems.



And, not to forget: all the server side processing is based on Java Server Faces, the Java standard for server side User Interface processing. In case you require e.g. a thin client processing for sophisticated HTML pages you still can take usage of other JSF component libraries.

General Improvements

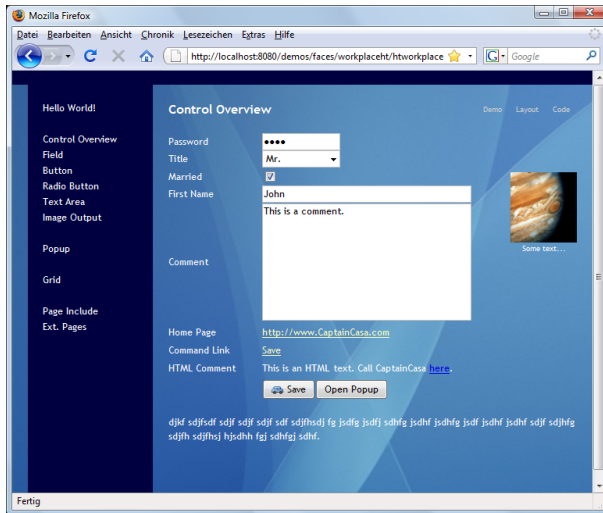
Aside the big points a huge number of “small issues” were either provided or solved, containing:

- Consistent availability of attributes throughout the set of components.
- Improved possibilities to specify drawing rules within the background painting.
- Reduced data volume that is sent from the server to the client. Improved delta rendering performance.
- Animated components for certain optical effects.
- Improvements in toolset.
- Many new components for the rich User Interface processing.

HTML Renderer

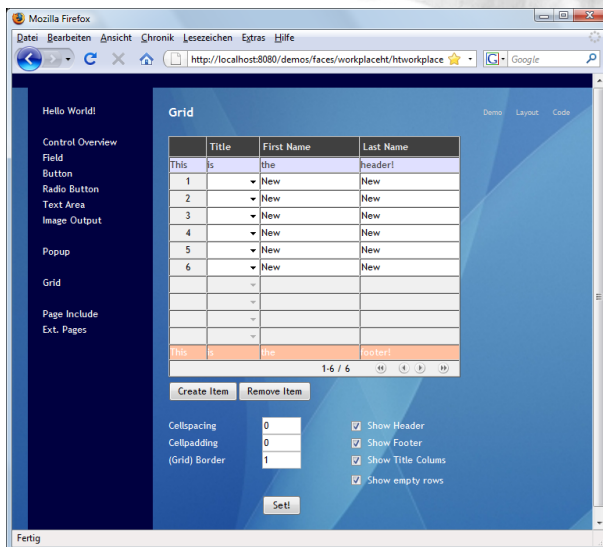
This might sound astonishing: CaptainCasa's main and clear focus in the area of User Interfaces is to provide rich clients for operationally used applications. That's why we selected a Java Swing based rendering technology for the front end part!

But: the clear advice from the Community was: there's a need for a plain, simple HTML Renderer covering the basic needs of form oriented pages.



The HTML renderer is just an extension of the existing component library. You use the same tools, that you use for assembling rich UI pages, in order to assemble HTML pages. The names of the HTML components and the names of their attributes is "borrowed" from their big brothers, the rich components you already now.

Result: development of pages is as simple and efficient as with rich pages, you are in the same framework - with a reduced set of components.



The main usage scenarios for the HTML Renderer are:

- Simple HTML pages
- Pages to run on limited hardware, e.g. hand-held portables

Jasper Reports Integration

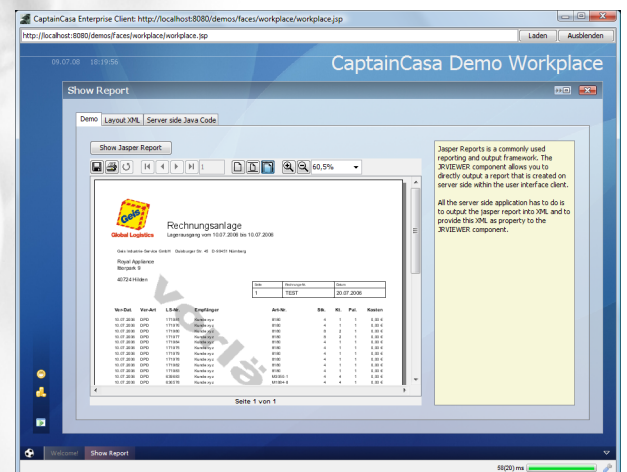
Reporting and printing is typically one of these features that one cares about too late within an application development.

We recommend the usage of Jasper Reports (<http://jasperreports.sourceforge.net/>) for the output oriented application functions.

- There is a separation between the layout of the output and the logic providing the data.
- There are many output formats - covering pdf, xls, csv, xml
- Reports can be directly sent to the printer by Java commands.

The CaptainCasa Enterprise Client supports Jasper Reports in the following way:

- Reports / Output, that is produced on server side, can directly be seen within the client front end.
- Reports / Output can be sent to the client side printer, either with or without print dialog.

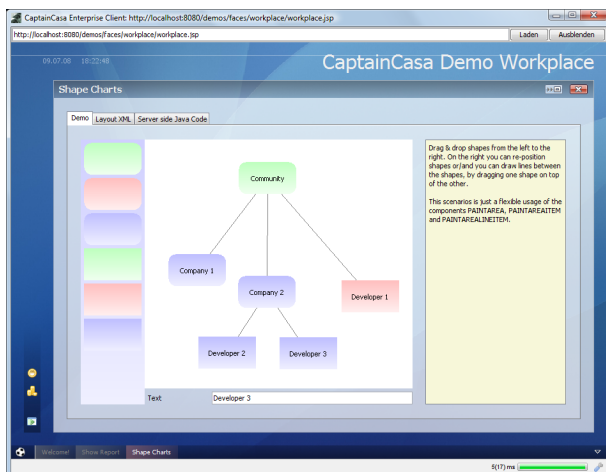


Especially the printing part is something which is inevitably important in a lot of operational scenarios. From application's point of view you can use Jasper Reports in two ways.

- You create an output as part of your server side processing and send it to a printer which is defined on server side. In this case printing does not affect the client at all.
- Or/and: you create an output on server side and send it to the client side printer using the corresponding CaptainCasa component. You may decide if to directly print to the default printer or to let the user interact and define a printer within a printer selection dialog.

Shapes & Diagrams

It is now very simple to create diagrams including different shapes, that may be connected with lines:



Shapes can be drawn in a flexible way, including:

- rectangle, rounded rectangle, ellipse
- background color: either straight color or color changing from one value to another
- Lines provide multiple arrow formats to be defined for their start or end point.

Operations like drag&drop, right mouse button menu, selection etc. are available - both on shape and line level.

Changing the position of shapes is executed in an animated way.

Touch Screen Components

“Operationally used” may also mean that your application is used through touch screen devices.

Certain components, including localized “touch pads” are now included in the component library:



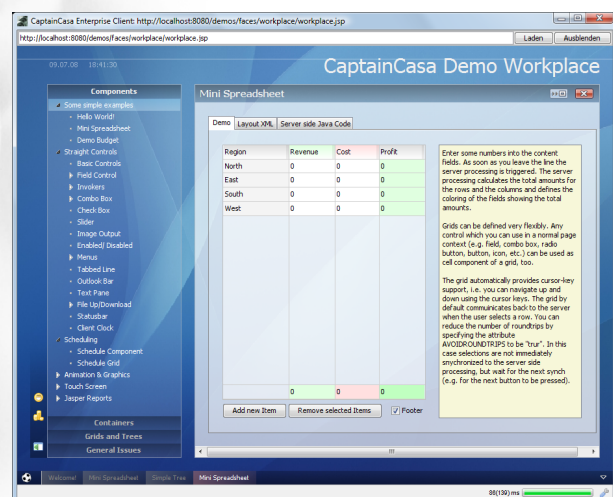
Touch pad components are either directly located as part of the screen or are available as popup component when the user clicks onto a field.

Workplace Framework

The workplace framework is set on top of the rich client component library. It supports you to easily define complex application scenarios, in which several processes are started within one screen context.

The workplace framework includes:

- Separation of screen into size-able areas in which functions can be started.
- Tree(s) of available functions (dynamically defined, e.g. after user logon).
- Content area, in which multiple tasks can be started in parallel. Switching between tasks. Isolation of tasks into popup windows.
- Management of favorites.
- Management of life cycle for each task. Strict separation of tasks on server side - so that each task is running in an isolated object environment (when required).



Hot Deployment

This is an aspect for improving speed (and fun...) during development: it is now possible to run the User Interface related classes within a classloader on their own.

This hot deployment classloader can be re-started without re-starting your whole web application.

Result: development round trip cycles, from changing something within the code to testing it through the User Interface, are much faster.

“Hot Deployment” is not a feature which is “100% necessary” for small projects - but it is inevitably important for bigger projects, in which reload durations of applications take a certain duration.

General Improvements

Sizing

Percentage size definitions can now be combined with defining a minimum size. E.g. you define an area to take 50% of the screen's size, but 200 pixels as minimum.

Background Painting

Components consistently provide a BGPAIN attribute that contains a semicolon separated list of drawing commands. The number of commands was increased and now includes the drawing of ovals and borders.

Reduced Data Volume

The data volume that is sent from the server to the client was significantly reduced: if there is no change in whole areas of components, then the whole area is sent with the note "no change" to the client. Before, each component within the area was sent with its id as minimum.

Toolset Improvements

The toolset is taking use of the own workplace framework - you can edit multiple files in parallel and copy/paste items between the files.

Components

The number of components from Release 1.1 to Release 2.1 was significantly increased. Please check the demo workplace for details.

Compatibility Issues

Release 2.1 is completely compatible to Release 1.1. There is no change to be done in any parts of your application in order to upgrade.

Parts of 2.1 items were already made available as version updates of Release 1.1 and are in heavy use by early adaptors.

Find more Details...

This document is only a summary. Here's where you can find more details:

- Demo Workplace
- Developers' Guide
- and, of course...:
<http://www.CaptainCasa.com>, including
online demos and downloads

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