

Seaside

Advanced Topics

Topics

- **Advanced jQuery and Seaside <-> Javascript**
- **New since 3.1:**
 - RESTfulComponentFilter
 - SessionTrackingStrategy
- **GsDevKit**
- **Your questions...**

Getting Started

- **Download Pharo 3 from <http://www.pharo.org>**
- **Download zipfile with pre-loaded image from:**

<http://bit.ly/1ySPvgs>

Webpage to Webapp

- **STEP 1: ajaxify the TODO application**

WATODO>>renderAddNewTodoOn:

WATODOItem>>renderContentOn:

use jQuery AJAX form serialization

use jQuery DOM manipulation to update the client

Webpage to Webapp

- **STEP 2: Reduce requests to the server: combine ajax calls**

Combining AJAX Callbacks

Primary ajax callbacks:

- `#callback:`
- All response rendering callbacks

Only 1 per request

`#script:`, `#html:`, `#json:`, `#text:`, `#respond:`

Secondary ajax callbacks:

- `#callback:value:`
- Convenience callbacks
 - `#callback:json:`, `#callback:passengers`, ...
- `#serialize*`:

Multiple per request

+200 locations

1 - 2 months

The screenshot displays a calendar interface with a grid of events. The columns represent different rooms: DM_Spiegelzaal, DM_Middenzolder, DM_Achterzolder, DM_Conferentiezaal 1, DM_Conferentiezaal 2, DM_Conferentiezaal 3, DM_Studio, DM_Keuken, and DM_Witte Z...

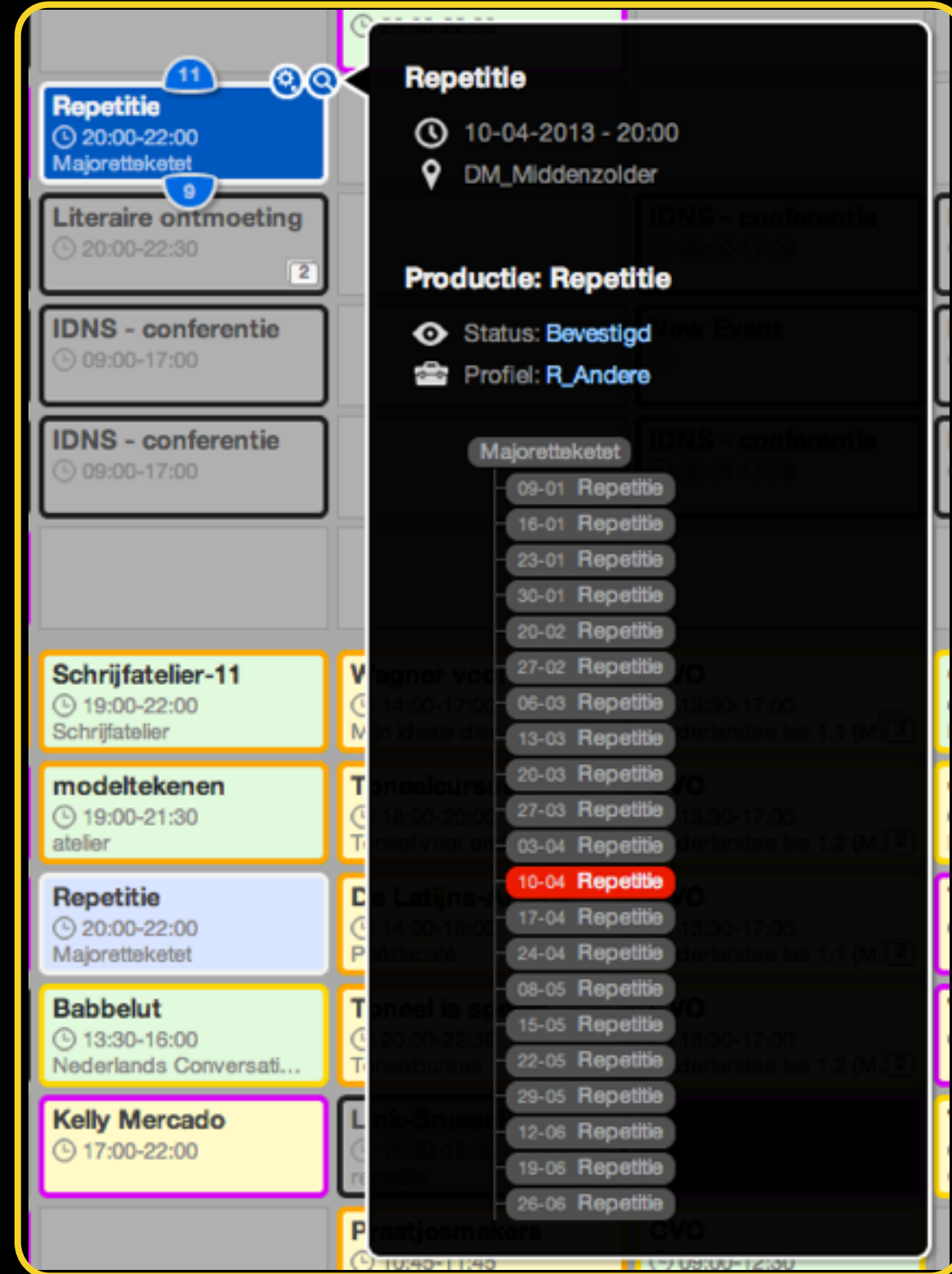
The rows represent dates from Monday, 29-04-2013, to Friday, 10-05-2013. Each cell in the grid contains an event card with details such as the event name, time, and location. For example, on Monday, 29-04-2013, there are events like 'Stefan Hertmans : ...' in DM_Spiegelzaal and 'Theatercursus' in DM_Middenzolder.

At the bottom of the screen, there is a navigation bar with icons for various functions: EVENEMEN..., TEAMS, RESOURCES, CONTACTEN, TAKEN, RAPPORTEN, HELP, ZOEKEN, ADMINISTR..., TO DO, WAARSCHU..., and UPDATES. There are also notification counts for 'WAARSCHU...' (474) and 'UPDATES' (3094).

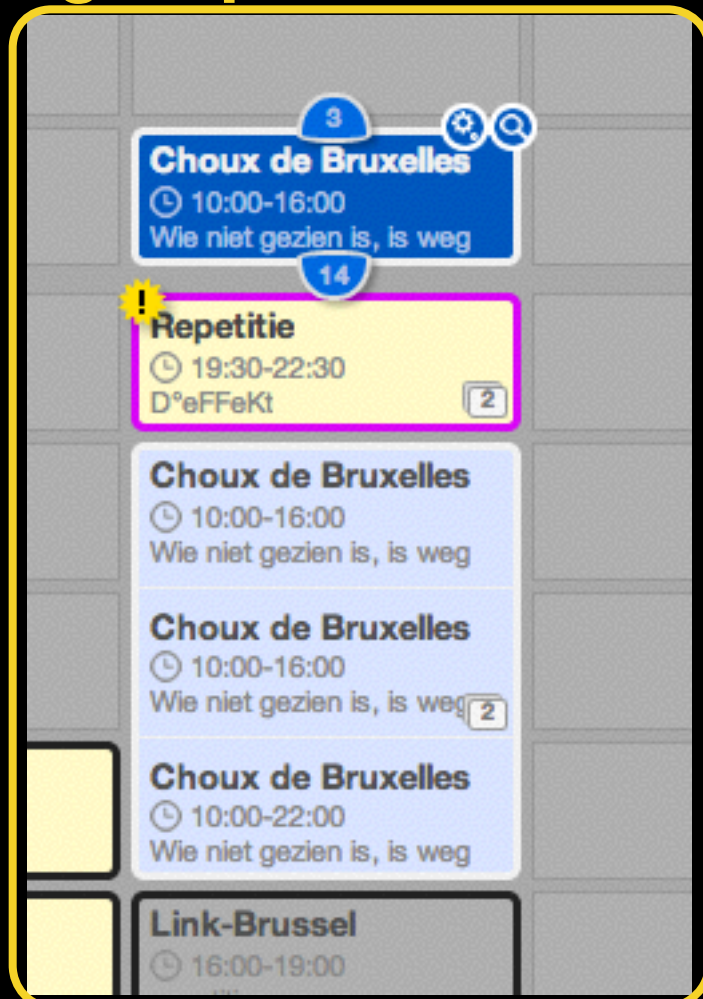
in-place editing



info bubbles



group visualization



DM_Spiegelzaal DM_Middenzolder DM_Achterzolder DM_Conferentiezaal 1 DM_Conferentiezaal 2 DM_Conferentiezaal 3 DM_Studio DM_Keuken DM_Witte Zo...

ma 29-04-2013	Stefan Hertmans : ... 19:00-23:00 Vlaamse Club	Theatercursus 19:45-22:15 De wijngaard	Alleluia, Alleluie, All... 14:00-17:00 Mijn ideale discotheek	CVO 13:30-17:00 Nederlandse les 1.1 (M) 3	Vergadering met d... 09:00-12:00 SAS Scholengemeensc. 2	CVO 18:00-21:30 Nederlandse les 1.2 (M) 2		Repetitie 19:30-22:30 D'eFFeKt
di 30-04-2013	VOC Entree GC 17:00-22:00	modeltekenen 19:00-21:30 atelier 2	Toneelcursus 18:00-20:00 Toneel voor anderstalige 2	CVO 13:30-17:00 Nederlandse les 1.2 (M) 2	Cursus Amarant 14:00-16:30 De heksenvervolgingen 2	Fotografie 20:00-22:00 Inleiding tot fotografie 2		Dans 19:30-21:30 Hedendaagse d
wo 01-05-2013 Feestdag	Feestdag Feest va... ○	Feestdag Feest va... ○	Feestdag Feest va... ○	Feestdag Feest va... ○	Feestdag Feest va... ○	Feestdag Feest va... ○	Feestdag Feest va... ○	
do 02-05-2013	Fanfare 20:00-22:00	Babbelut 13:30-16:00 Nederlands Conversati...	Toneel is spelen 20:00-22:30 Toneelcursus 2	CVO 13:30-17:00 Nederlandse les 1.2 (M...	Stichting Lodewijk... 18:00-20:30			Toneel is spe 20:00-22:30
vr 03-05-2013	Stadskriebels ○					Het Rode Kruis 09:00-17:00		Link-Brussel 16:00-19:00 repetitie
za 04-05-2013	Stadskriebels ○		Praatjesmakers 10:45-11:45 Keuters *2007+*2008 2	Stadskriebels 12:30 2	Institut fur Kulturk... 09:00-19:00	Stadskriebels 12:30 2	Stadskriebels ○	Stadskriebels ○
zo 05-05-2013	Stadskriebels ○	Workshop Majoret... Stadskriebels	staadskriebels ○	Stadskriebels ○	Institut fur Kulturk... 10:00-14:00	Stadskriebels ○	Stadskriebels ○	Stadskriebels 09:00-23:00 New group
ma 06-05-2013		Theatercursus 19:45-22:15 De wijngaard		CVO 13:30-17:00 Nederlandse les 1.1 (M) 2	Sensoa 13:00-17:30 2	Taaluniecentrum N... 09:00-16:00 2		Repetitie 19:30-22:30 D'eFFeKt
di 07-05-2013		modeltekenen 19:00-21:30 atelier	Toneelcursus 18:00-20:00 Toneel voor anderstalige 2	CVO 09:00-12:30 Nederlandse les 2.2 (M) 2	Cursus Amarant 14:00-16:30 De heksenvervolgingen	Fotografie 20:00-22:00 Inleiding tot fotografie 2	New Event ○	Dans 19:30-21:30 Hedendaagse d
wo 08-05-2013	Salon Dansant 46 09:00-22:00 3	Repetitie 20:00-22:00 Majorettekoret 2	EDUCATIEVE UIT... 10:00-13:30	CVO 13:30-17:00 Nederlandse les 1.1 (M) 3	Vernieuwings Brugge 10:00-12:30 2	CVO 18:00-21:30 Nederlandse les 1.2 (M) 3	EDUCATIEVE UIT... 10:00-13:30	EDUCATIEVE UIT... 10:00-13:30
do 09-05-2013 Feestdag	Salon Dansant 46 09:00-22:00	Babbelut 13:30-16:00 Nederlands Conversati...	FEESTDAG ○	FEESTDAG ○	FEESTDAG ○	FEESTDAG ○	FEESTDAG ○	Theatercursu 13:30-20:00 <input autocomp
vr 10-05-2013	Salon Dansant 46	DE MARKTEN SLUIT	DE MARKTEN SLUIT	DE MARKTEN SLUIT	DE MARKTEN SLUIT	DE MARKTEN SLUIT	DE MARKTEN SLUIT	Theatercursu

EVENIMEN... TEAMS RESOURCES CONTACTEN TAKEN RAPPORTEN HELP ZOEKEN ADMINISTR... TO DO WAARSCHU... UPDATES

Webpage to Webapp

- **STEP 3: Scale it by working with delegated events**

Use passengers server-side for each separate element

Use top-level event handler doing a passenger lookup

Working with JS libraries

```
# d3.json(url[, callback])
```

Creates a request for the **JSON** file at the specified *url* with the mime type "application/json". If a *callback* is specified, the request is immediately issued with the GET method, and the callback will be invoked asynchronously when the file is loaded or the request fails; the callback is invoked with two arguments: the error, if any, and the parsed JSON. The request is made using `xhr.get` or similar, and handled using `xhr`.

Get JSON data from a file via Ajax, using `dataSrc` to change `data` to `tableData` (i.e. `{ tableData: [...data...] }`):

```
1 $('#example').dataTable( {  
2   "ajax": {  
3     "url": "data.json",  
4     "dataSrc": "tableData"  
5   }  
6 } );
```

- **Javascript framework calling back to Seaside**
 - Url
 - Function

JS calling back into Seaside

- **Wrap a jQuery ajax callback in a JS function**
 - Easiest using existing jQuery wrapper code and JS generation
 - Not always possible if the library requires a url
- **Generate a url to an action callback**
 - Requires a bit more understanding of how callbacks work
 - (Implement once, reuse all the time)