

TYPO3 Core - Feature #12664

Idea about faster loading modules

2011-01-31 10:10 - Kay Strobach

Status:	Closed	Start date:	2011-01-31
Priority:	Must have	Due date:	
Assignee:	Kay Strobach	% Done:	100%
Category:		Estimated time:	0.00 hour
Target version:		Complexity:	
PHP Version:		Sprint Focus:	
Tags:			

Description

Hello guys,

using 4.5 since trunk now i do have a suggestion how to speed up module loading in backend rapidly ;) (It's still fast - but can be even more faster)

Step 1:

Use an ExtJS CardLayout for the right Module Frame.

Step 2:

Old modules get an iframe (eventually only one) in that CardLayout(Like Tabs but without userselectable card - needs to be selected via activeCard setting).

New Modules get an ExtPanel.

Step 3:

Event about changed env:

- module activated
- module deactivated
- pageselected
- ...

Using that the new modules like extmgm, trash, EXT:ks_sitemgr and others get the change to transfer only changed parts (grid stores, etc.) and thus it makes UI faster.

What do you think about that?

Regards

Kay

Related issues:

Related to TYPO3 Core - Task #28590: Backport some changes for 4.6 to 4.5 as ...	Rejected	2011-07-30
Related to TYPO3 Core - Bug #28604: Switching from workspace module to anothe...	Closed	2011-07-31
Related to TYPO3 Core - Task #30645: Revert "[FEATURE] Speed-up Backend with ...	Closed	2011-10-08
Has duplicate TYPO3 Core - Feature #24901: Idea about faster loading modules	Rejected	2011-01-31
Precedes TYPO3 Core - Feature #28384: Add ExtJS Xtype for BE Modules	Closed	2011-07-22
Precedes TYPO3 Core - Bug #28523: Problems with new Card Layout in backend mo...	Closed	2011-07-27

Associated revisions

Revision 120d38d1 - 2011-07-27 15:45 - Kay Strobach

[FEATURE] Speed-up Backend with CardLayout

This patch adds a cardlayout to the Backend.

BE Modules may register themselves to the page renderer and add cards directly to the layout.

To achieve that, a new way of adding JavaScript to the BE is available.

```
$GLOBALS['TBE_MODULES']['_JSINIT']['key'] = 'JSCODE';
```

This way changing the module is quite fast.

To keep old behaviour the iframe is loaded with the module root url if the module item of an already opened module is clicked.

The Extension Manager or the About module can be simply reworked to support that feature.

Other new features like the dashboard depend on this change too.

API hints:

JavaScript

- in old times we used:

```
TYPO3.Backend.ContentContainer.setUrl(uri);
```

Now please use

```
TYPO3.ModuleMenu.App.openInContentFrame(uri, params);  
The "new" function was available before and knows the current  
module. This function uses the correct iframe - if it is allowed to  
load the module.
```

PHP

- added new Parameter to t3lib_extMgm::addModule to disable the card autocreation on demand

Change-Id: I2bf206b7154c20575b0d2ce72150621b2dfbdb35

Resolves: #12664

Releases: 4.6, 4.5

Reviewed-on: <http://review.typo3.org/3370>

Reviewed-by: Philipp Gampe

Tested-by: Philipp Gampe

Tested-by: Soren Malling

Reviewed-by: Xavier Perseguers

Tested-by: Xavier Perseguers

History

#1 - 2011-01-31 10:45 - Jens Hoffmann

- *Category changed from Usability to Technical*

- *Status changed from New to Rejected*

- *Priority changed from Should have to Could have*

Hy,

this isn't a usability thing, beside good performance is good usability.
Open a Feature Request in the 4.6 Core Team Issue Tracker, please.

Greez Jens

#2 - 2011-01-31 11:03 - Kay Strobach

Moved to <http://bugs.typo3.org/view.php?id=17416>

#3 - 2011-01-31 11:07 - Jens Hoffmann

- *Status changed from Rejected to Closed*

Thx for your quick reaction.

In general I got to say, I thought,
it was implemented like that :)

Greez Jens

#4 - 2011-07-15 18:22 - Kay Strobach

- *Status changed from Closed to New*

- *Assignee set to Kay Strobach*

still valid.

had many talks to steffen kamper about that - will upload patch soon.

also got votes from xavier ;)

thanks in advice
Kay

#5 - 2011-07-15 20:08 - Mr. Hudson

Patch set 1 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#6 - 2011-07-15 20:12 - Kay Strobach

Example of use for extmgm:

```
TYPO3.Viewport.Panels.push({
    html: '<iframe width="100%" height="100%" src="mod.php?M=tools_em" frameborder="0"></iframe>',
    id : 'typo3-card-tools_em'
});
```

ideally the modules do not use iframes but real extjs panels ;)

#7 - 2011-07-15 20:19 - Kay Strobach

adding js to the body should be done like it's done for the toolbars:

example in EXT:sitemgr:

EXT:sitemgr/ext_tables.php

```
if (TYPO3_MODE == 'BE') {
    $GLOBALS['TYPO3_CONF_VARS']['typo3/backend.php']['additionalBackendItems'][]
    = t3lib_extMgm::extPath($_EXTKEY).'Classes/ToolbarItems/CustomerSelector/Hook.php';
}
```

EXT:sitemgr/Classes/ToolbarItems/CustomerSelector/Hook.php

```
include_once(t3lib_extMgm::extPath('sitemgr').'Classes/ToolbarItems/CustomerSelector/Item.php');
$GLOBALS['TYPO3backend']->addToolbarItem('sitemgr', 'Tx_Sitemgr_ToolbarItems_CustomerSelector_Item');
```

EXT:sitemgr/Classes/ToolbarItems/CustomerSelector/Item.php

```
class Tx_Sitemgr_ToolbarItems_CustomerSelector_Item implements backend_toolbarItem {
    //... add some functions and important the render function
}
```

Suggestion add an easy way (array) to add js files to the backend.

Regards
Kay

#8 - 2011-07-15 21:14 - Jens Hoffmann

- Status changed from New to Closed
- Priority changed from Could have to Won't have this time

Hy Kay.

ONCE AGAIN. LAST TIME. NO!! Technical stuff here!
Don't reopen a closed ticket! Stop this "spam" here.
Open a issue at the core tracker instead. NOT here!

Jens.

#9 - 2011-07-15 21:36 - Kay Strobach

- Tracker changed from Feature to Suggestion
- Project changed from 78 to 1522
- Category deleted (Technical)

- Status changed from Closed to New
- Priority changed from Won't have this time to Should have
- Target version deleted (TYPO3 4.6)

Hi Jens just forgott to move the entry. ...

It's done now. If the skin team is invalid too - please move it to the Core.

Thanks
Kay

#10 - 2011-07-15 21:45 - Kay Strobach

- Tracker changed from Suggestion to Feature
- Project changed from 1522 to TYPO3 Core

#11 - 2011-07-16 23:45 - Mr. Hudson

Patch set 2 of change l2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
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#12 - 2011-07-17 03:00 - Stefan Neufeind

To my understanding these cards stay opened (just hidden) in the browser, right? So could it actually be that we're putting much more load on the client this way? Or might it actually be able to reuse components this way because components can be shared between cards? But this would require them to use more than just <iframes> inside the cards, right?

It looks like cards get loaded as soon as the backend itself loads. Might it make sense to "lazy-load" cards cards (load their contents on first use; or maybe even delay instantiaing of cards)?

#13 - 2011-07-17 10:06 - Kay Strobach

@Stefan,

the idea of the cardlayout is to be prepared for new be modules which are mainly developed with extjs.
These modules won't need an iframe with a additional instance of extjs, but can place their code directly in the be.
The modules can also register for events on the pagetree and it's possible to drag'n'drop elements from the pagetree to such modules ;)

The iframe is just an example as it would take some time to rewrite the extmgm (1-2 days) - i think (old one will be removed with that change though).

With a good code architecture modules can be written so, that they work either with the card layout or with the old fashioned iframe ;)
I will can examples lateron ;)

Hope that helps to understand the change ;)

Thanks in Advance
Kay

#14 - 2011-07-17 10:11 - Mr. Hudson

Patch set 3 of change l2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
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#15 - 2011-07-17 15:33 - Steffen Kamper

- TYPO3 Version set to 4.6

just some words i also commented in Gerrit:

Make an API to register an easy way.
First, don't use Panel, this is too general. I made a suggestion:

```
TYPO3.Viewport.ContentCards = {  
    ...  
    addContentCard: function(config, name) {  
        this.add(Ext.apply(config, {  
            id: 'typo3-card-' + name  
        }));  
    }  
}
```

then also implement something like this in php, which adds cards inline.

#16 - 2011-07-17 16:35 - Kay Strobach

@event

each card is allowed to register to any event of any extjs component ;)
This way it's possible to get the params from the tree instantly onclick.

@api:

ok i thought panels should not be added during runtime. But it can be usefull though.

#17 - 2011-07-18 11:00 - Mr. Hudson

Patch set 4 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#18 - 2011-07-18 11:06 - Kay Strobach

- *File cards.zip added*

- *% Done changed from 0 to 60*

#19 - 2011-07-18 13:29 - Mr. Hudson

Patch set 5 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#20 - 2011-07-18 15:14 - Mr. Hudson

Patch set 6 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#21 - 2011-07-18 16:42 - Mr. Hudson

Patch set 7 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#22 - 2011-07-18 16:52 - Mr. Hudson

Patch set 8 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#23 - 2011-07-18 16:53 - Mr. Hudson

Patch set 9 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#24 - 2011-07-18 17:32 - Mr. Hudson

Patch set 10 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#25 - 2011-07-18 17:44 - Mr. Hudson

Patch set 11 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#26 - 2011-07-20 13:53 - Mr. Hudson

Patch set 12 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#27 - 2011-07-20 20:25 - Mr. Hudson

Patch set 13 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server.
It is available at <http://review.typo3.org/3370>

#28 - 2011-07-21 08:38 - Björn Pedersen

- *File cardlayout_1px.png added*

With the latest patch I experience a 1px offset in the main window, see screenshot.

(Firefox 5.0/Linux)

#29 - 2011-07-21 20:59 - Mr. Hudson

Patch set 14 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server. It is available at <http://review.typo3.org/3370>

#30 - 2011-07-21 22:14 - Mr. Hudson

Patch set 15 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server. It is available at <http://review.typo3.org/3370>

#31 - 2011-07-22 11:23 - Mr. Hudson

Patch set 16 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server. It is available at <http://review.typo3.org/3370>

#32 - 2011-07-22 11:26 - Kay Strobach

- File cards.zip added

#33 - 2011-07-22 13:40 - Xavier Perseguers

- Status changed from New to Under Review
- Priority changed from Should have to Must have
- Target version set to 4.6.0-beta1

#34 - 2011-07-22 14:01 - Kay Strobach

added some documentation ;) http://wiki.typo3.org/Extension_Development_native_ExtJS_Modules

#35 - 2011-07-24 10:35 - Mr. Hudson

Patch set 17 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server. It is available at <http://review.typo3.org/3370>

#36 - 2011-07-24 10:49 - Mr. Hudson

Patch set 18 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server. It is available at <http://review.typo3.org/3370>

#37 - 2011-07-24 14:30 - Mr. Hudson

Patch set 19 of change I2bf206b7154c20575b0d2ce72150621b2dfbdb35 has been pushed to the review server. It is available at <http://review.typo3.org/3370>

#38 - 2011-07-24 18:13 - Kay Strobach

From Topic ML:typo3.v4:[TYPO3-dev] [TYPO3-v4] Change of Module switching behaviour in 4.6 (perhaps backport to 4.6) - Speedup Backend with Cardlayout

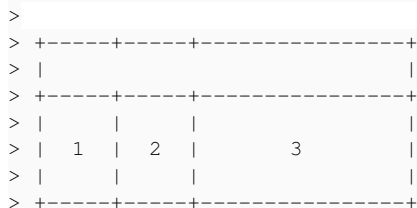
Hello guys,

based on 2 discussions started in February i pushed a patch to gerrit [1] to speed up the switching of the backend a bit. This patch has a small side effect: it changes the behaviour of the module menu.

You may also want to read the older articles about the cardlayout: [2][3]

First of all i will start with current master aka 4.5. be architecture.

> Currently there is a viewport which is like this one:



> The area 2 (pagetree, directory tree, ...) is hidden if the module doesn't need it - good.

> But any module in 3 is loaded as normal html page.
The idea of the patch is to modify field 3 to ensure, that modern extjs based backend modules are not loaded again and again and again on every module switch.
This modules can be imagined as: (em, recycler, powermail, sitemgr, piwikintegration, ...) on

So how could this achieved:
Currently 3 is an so called iframepanel with a single iframe [7].
We change 3 to a normal panel, with layout:card [8], which first child is the old style iframe panel.

Additionally we add an extra panel for each module (automatically).
These panels are rendered as cards.

So 3 consists of n different card-panel for every BE Module.

If you need to change from one card to another, there is no need to reload the panel, as long as you do not change the page in the pagetree.

This way all the cards save their state if sensefull.

That means, that switching from listmodule back to pagemodule may show you the previously edited form and not the overview page of the selected page.

To keep it simple to reload the module, you may click on the modulemenu again to force a reload.

Now back to the greatest positive effect:
ExtJS Modules are loaded with the Backend, that means, the may only need time to reload their stores, but they won't need time to reload the complete module. As more and more modules are done in extjs this should be the way to go in my eyes.

You may also take a look in the issue on forge [4] or in Gerrit [1].

From the Usability kind of View this patch changes the modulemenu from being dumb buttons to something like intelligent tabs, which allow to work faster, as useless loading is avoided.

Additionally to that change there is a small change that depends on that change. A standardized way to style BE modules done with extjs [5], [6].

Regards
Kay

[1] <https://review.typo3.org/#change,3370>
[2] <http://lists.typo3.org/pipermail/typo3-dev/2011-February/042621.html>
[3] <http://lists.typo3.org/pipermail/typo3-project-v4/2011-May/002236.html>
[4] <http://forge.typo3.org/issues/12664>
[5] <https://review.typo3.org/#change,3696>
[6] <http://forge.typo3.org/issues/28384>
[7] -> see typo3/js/extjs/iframepanel.js
[8] <http://dev.sencha.com/deploy/ext-3.4.0/docs/?class=Ext.layout.CardLayout>
-- <http://www.kay-strobach.de> - Open Source Rocks TYPO3 inspiring people to share! Get involved: <http://typo3.org>

#39 - 2011-07-27 15:45 - Xavier Perseguers

- % Done changed from 60 to 80

TYPO3 master: Change has been successfully cherry-picked as 120d38d1015117cc415482e7efec35430a5e3dfd.

#40 - 2011-07-27 16:00 - Kay Strobach

- Status changed from Under Review to Resolved

- % Done changed from 80 to 100

Applied in changeset [120d38d1015117cc415482e7efec35430a5e3dfd](https://review.typo3.org/#change,3370).

#41 - 2012-03-07 13:34 - Xavier Perseguers

- Status changed from Resolved to Closed

#42 - 2013-06-01 14:45 - Ernesto Baschny

- Target version deleted (4.6.0-beta1)

Files

cards.zip	17.1 KB	2011-07-18	Kay Strobach
cardlayout_1px.png	938 Bytes	2011-07-21	Björn Pedersen
cards.zip	23.5 KB	2011-07-22	Kay Strobach