Core - Bug # 54982

Epic # 55070 (Accepted): Workpackages

Epic # 55065 (New): WP: Overall System Performance (Backend and Frontend)

Bug # 52949 (Resolved): Speed decrease since 4.5

Status:	Resolved	**Priority:**	Should have
Author:	Rupert Germann	**Category:**	Performance
Created:	2014-01-14	**Assigned To:**	Alexander Opitz
Updated:	2015-03-03	**Due date:**	

TYPO3 Version:	6.2
PHP Version:	5.4
Complexity:	
Is Regression:	Yes
Sprint Focus:	

Subject:	Performance of eID-scripts in TYPO3 6.2

Description

Compared to TYPO3 4.5 EId calls in TYPO3 6.2 are very slow.

I made some tests with a simple extension which only includes and executes a mostly empty php file via the Eid mechanism.
tests where made with apache bench on a Windows machine.

ab comandline was: ab.exe -n 1000 -c 8 "url"

    APC off
    requests/s
    TYPO3 6.2   20
    TYPO3 4.5.30   79

    APC On (shm size = 64m)
    requests/s
    TYPO3 6.2   23
    TYPO3 4.5.30   147

you see that 6.2 is roundabout 4 times slower with APC disbled and more than 6 times slower with APC enabled.
If I analyze this calls with a profiler I see that most of the time is wasted in the classloader cache.

Possible solutions:

optimize the classloader performance.
move the Eid Hook to an earlier place in the bootstrapping sequence.

History

#1 - 2014-01-14 15:27 - Rupert Germann

- Target version set to 6.2.0

#2 - 2014-01-14 16:37 - Markus Klein

- Parent task set to #52949

#3 - 2014-01-20 16:32 - Ingo Schmitt

- Category set to Performance

#4 - 2014-02-24 11:49 - Alexander Opitz

Hi Rupert,

I'd like to take a look into this. Can you please add your Test Extension as zip file here?

Also I'd like to know more about your used software versions of PHP, apc, apache.

I don't think it will work to move the Eid hook in bootstrapping before class loader, course else we wouldn't have classes. ;)

#5 - 2014-05-13 12:50 - Oliver Hader
- Status changed from New to Needs Feedback

Is this still valid? A lot of things have been optimized with the help of the performance workpackage in February and March 2014...

#6 - 2014-09-07 17:32 - Stephan Großberndt
- File eid_test.zip added

This is still valid. Even if the difference is less now - still about 2 times slower with and without APC.

I have created a eID-Test-Extension with four very simple test cases:

Requests per second [#/sec] (mean)

Version: Non-APC || APC

/index.php?eID=eid_test
4.5.36-dev: 81.87 || 95.25
6.2.-dev: 42.51 || 49.87

/index.php?eID=eid_test_db
4.5.36-dev: 74.19 || 92.10
6.2.-dev: 40.27 || 45.61

/index.php?eID=eid_test_feuser
4.5.36-dev: 45.05 || 74.01
6.2.-dev: 30.28 || 37.88

/index.php?eID=eid_test_db_feuser
4.5.36-dev: 81.52 || 100.15
6.2.-dev: 41.07 || 47.75

The extension directory also contains a logs/eid_test.bat with the ab.exe calls and subdirectories logs/apc logs/non-apc with the full ab.exe reports

These tests were run with xampp-win32-1.8.2-6-VC9-installer.exe - Apache 2.4.10, MySQL 5.5.39, PHP 5.4.31
APC tests were run with php_apc-3.1.10-5.4-vc9-x86.zip - ts/php_apc.dll, apc.shm_size = "256M"

As you can see there is a huge performance penalty if you use tslib_eidtools::initFeUser() and do not use tslib_eidtools::connectDB() before!

#7 - 2014-09-07 17:54 - Stephan Großberndt

So I just found out it is not necessary since 6.1 to do tslib_eidtools::connectDB(), it just does
\TYPO3\CMS\Core\Utility\GeneralUtility::logDeprecatedFunction in 6.1 and later.

So you may just ignore the _db tests, but anyway - the difference is there.

Time per request: [ms] (mean)

Version: Non-APC || APC

/index.php?eID=eid_test_feuser
4.5.36-dev: 177.570 || 108.093
6.2.-dev: 264.232 || 211.180

#8 - 2014-09-11 16:07 - Alexander Opitz
- Status changed from Needs Feedback to Accepted
- Assigned To set to Alexander Opitz
- Target version deleted (6.2.0)

#9 - 2015-01-24 16:22 - Marcus Schwemer

Hi,

we run into the same issue using the extension "powermail_cond".

It would be very good if there would be some progress.

TIA
Marcus

#10 - 2015-03-02 20:26 - Wouter Wolters
- Status changed from Accepted to Needs Feedback

Please re-check the speed with 6.2.10. With the new classloading mechanism this should be faster now.

#11 - 2015-03-02 21:55 - Stephan Großberndt
- Subject changed from Very bad EId Performance in TYPO3 6.2 to Very bad eID-Performance in TYPO3 6.2

On the same machine as before:

> Requests per second [#/sec] (mean)
>
> Version: No-Cache || APC || PHP 5.5 opcache
>
> /index.php?eID=eid_test
> 4.5.36-dev PHP 5.4: 81.87 || 95.25 || -
> 6.2.4   PHP 5.4: 42.51 || 49.87 || -
> 6.2.4   PHP 5.5: 61.30 || - || 332.89
> 6.2.11-dev PHP 5.5: 63.08 || - || 361.36
> 7.2-dev   PHP 5.5: 65.42 || - || 426.56
>
> /index.php?eID=eid_test_feuser
> 4.5.36-dev PHP 5.4: 45.05 || 74.01 || -
> 6.2.4   PHP 5.4: 30.28 || 37.88 || -
> 6.2.4   PHP 5.5: 44.34 || - || 191.62
> 6.2.11-dev PHP 5.5: 45.36 || - || 200.01
> 7.2-dev   PHP 5.5: 46.36 || - || 216.01

For 7.2-dev I used in eid_test_feuser.php

```php
<?php

$feUserObj = TYPO3\CMS\Frontend\Utility\EidUtility::initFeUser(); // Initialize FE user object

var_dump('eid_test_feuser!');
```

Whereas one might conclude: Performance is marginally better in TYPO3, update PHP to 5.5 and **use php_opcache**!

Until now I used the standard debian PHP packages but now I consider using dotdeb.org...

#12 - 2015-03-02 22:16 - Alexander Opitz

Can you please add TYPO3 4.5 with PHP 5.5 for comparision?

#13 - 2015-03-02 22:51 - Stephan Großberndt

> Requests per second [#/sec] (mean)
>
> Version: No-Cache || APC || PHP 5.5 opcache
>
> /index.php?eID=eid_test
> 4.5.36-dev PHP 5.4: 81.87 || 95.25 || -
> 6.2.4   PHP 5.4: 42.51 || 49.87 || -
>
> 4.5.41-dev PHP 5.5: 88.06 || - || 175.04
> 6.2.4   PHP 5.5: 61.30 || - || 332.89

6.2.11-dev PHP 5.5: 63.08 || - || 361.36

7.2-dev   PHP 5.5: 65.42 || - || 426.56

/index.php?eID=eid_test_feuser

4.5.36-dev PHP 5.4: 45.05 || 74.01 || -

6.2.4   PHP 5.4: 30.28 || 37.88 || -

4.5.41-dev PHP 5.5: 53.34 || - || 137.76

6.2.4   PHP 5.5: 44.34 || - || 191.62

6.2.11-dev PHP 5.5: 45.36 || - || 200.01

7.2-dev   PHP 5.5: 46.36 || - || 216.01

#14 - 2015-03-03 14:40 - Christian Kuhn

- Status changed from Needs Feedback to Resolved

Neat results :) I guess we can finally close this one then :)

#15 - 2015-03-03 15:36 - Alexander Opitz

I'm a bit puzzled.

for PHP5.5 and /index.php?eID=eid_test

4.5 is 88:63 better then 6.2 without cache but with opcache 4.5 is 137:200 slower then 6.2? This means opcache fastens 6.2 so much better then 4.5?
Really?

#16 - 2015-03-03 16:24 - Stephan Großberndt

- Subject changed from Very bad eID-Performance in TYPO3 6.2 to Performance of eID-scripts in TYPO3 6.2

Those were my results. The test extension is in this ticket, scripts as well. Test it yourself :-)

Files

| eid_test.zip | 16.2 kB | 2014-09-07 | Stephan Großberndt |