Redmine - Patch #18134

Issues with svn:mergeinfo property values and r13443 rails-4.1 rebase.

2014-10-20 06:05 - Mischa The Evil

Status:	New		**Start date:**	
Priority:	Normal		**Due date:**	
Assignee:			**% Done:**	0%
Category:	Code cleanup/refactoring		**Estimated time:**	0.00 hour
Target version:				

Description

After some Redmine core SCM log reviewing I noticed several issues:

1. related to svn:mergeinfo properties:
    1. [rails-4.1 branch] r13443 rebase of rails-4.1 branch included rails-4.1 backport commits to trunk[1] (in svn:mergeinfo only obviously): need to reverse-merge them for svn:mergeinfo
    2. [rails-4.1 branch] contains four commits merged from trunk[2]: this is not reflected in the respective svn:mergeinfo property
    3. [trunk] three commits were backported from rails-4.1 branch to trunk[3]: this is not reflected in the respective svn:mergeinfo property
    4. [2.6-stable branch] contains one commit merged from trunk (r13439): this is not reflected in the respective svn:mergeinfo property
2. related to the r13443 rails-4.1 rebase:
    1. [rails-4.1 branch] r13443 rebase is missing commits from trunk[4] ((start rails-4.1)..(start rebase)): still needs to be *merged*

So I checked out Redmine svn source and started fixing them one after another.

The first four are changes to the svn:mergeinfo values only (svn merge ... --record-only) and the last is a complete merge (thus with svn:mergeinfo property update) of fourteen commits where two files[5] had some simple conflicts to be solved manually:

- 1. reverse-merge-backport-commits-on-trunk_against_rails-4.1_at_r13451.patch: [view details...view details...](#)


    ```
    Index: .
    ===================================================================
    --- .      (revision 13451)
    +++ .      (working copy)

    Property changes on: .
    _____
    Modified: svn:mergeinfo
       Reverse-merged /trunk:r13405-13408
    ```

    Before this change, the svn:mergeinfo value for rails-4.1 branch was:


    ```
    /trunk:13333-13439
    ```

    after it, it looks like:


    ```
    /trunk:13333-13404,13409-13439
    ```


- 2. merge-merged-in-41-from-trunk_to_rails-4.1_at_r13451.patch: [view details...view details...](#)


    ```
    Index: .
    ===================================================================
    --- .      (revision 13451)
    +++ .      (working copy)

    Property changes on: .
    _____
    ```

```
Modified: svn:mergeinfo
    Merged /trunk:r13302,13306,13311,13332
```

Before this change, the svn:mergeinfo value for rails-4.1 branch was:

```
/trunk:13333-13404,13409-13439
```

after it, it looks like:

```
/trunk:13302,13306,13311,13332-13404,13409-13439
```

- 3. merge-backported-in-trunk-from-41_to_trunk_at_r13451.patch: <u>view details...view details...</u>

```
Index: .
===================================================================
--- .      (revision 13451)
+++ .      (working copy)

Property changes on: .
_____
Modified: svn:mergeinfo
    Merged /sandbox/rails-4.1:r13296,13313,13315
```

Before this change, the svn:mergeinfo value for trunk was:

```
n/a for rails-4.1
```

after it, it looks like:

```
/sandbox/rails-4.1:13296,13313,13315
```

- 4. merge-merged-in-2.6-stable-from-trunk_to_2.6-stable_at_r13451.patch: <u>view details...view details...</u>

```
Index: .
===================================================================
--- .      (revision 13451)
+++ .      (working copy)

Property changes on: .
_____
Modified: svn:mergeinfo
    Merged /trunk:r13439
```

Before this change, the svn:mergeinfo value for 2.6-stable branch was:

```
n/a for 2.6-stable
```

after it, it looks like:

```
/trunk:13439
```

- 5. merge-missing-in-41-from-trunk_to_rails-4.1_at_r13451.patch: <u>view details...view details...</u>

This only shows the merge tracking property changes; code changes are omitted to save some space...

```
Index: .
===================================================================
--- .     (revision 13451)
+++ .     (working copy)

Property changes on: .
_____
Modified: svn:mergeinfo
   Merged /trunk:r13284-13285,13287,13299,13303,13322-13327,13329-13331
Index: ...
...
...
```

Before this change, the svn:mergeinfo value for rails-4.1 branch was:

```
/trunk:13302,13306,13311,13332-13404,13409-13439
```

after it, it looks like:

```
/trunk:13284-13285,13287,13299,13302-13303,13306,13311,13322-13327,13329-13404,13409-13439
```

If these changes are applied then:

- rails-4.1 branch contains *all* commits on trunk between the creation of the branch upto [r13439](#) (fully rebased)
- svn:merginfo property was already introduced around 2.4-stable and custom_fields branch
- svn:merginfo property is started being reliably used with 2.6-stable (last 2.x?)
- svn:merginfo property is having full history of rails-4.1 and current trunk
- svn:merginfo property is having full history of and is reliably used with new major 3.0-stable and up

All the patches are taken against a checkout of the respective branches at [r13451](#). If more information is need, please let me know. I have a bunch of notes taken during the inspection, which I could attach if needed as well.
I hope this is of any use...

Regards,

Mischa.

[1] [r13407](#) and [r13408](#)

[2] [r13302](#), [r13306](#), [r13311](#) and [r13332](#)

[3] [r13296](#), [r13313](#) and [r13315](#)

[4] [r13284](#), [r13285](#), [r13287](#), [r13299](#), [r13303](#), [r13322](#), [r13323](#), [r13324](#), [r13325](#), [r13326](#), [r13327](#), [r13329](#), [r13330](#) and [r13331](#)

[5] config/locales/de.yml and Gemfile

Related issues:
Related to Redmine - Defect #18174: Rails-4.1 branch merge into trunk (r13482...   **Closed**

History

#1 - 2014-10-20 06:31 - Toshi MARUYAMA

Sorry. Because I use hgsubversion and "hg graft" or Mercurial Queues to **commit** to Subversion, it lose svn property.

I don't know how to apply attached patches.
Could you tell me?

#2 - 2014-10-20 07:28 - Mischa The Evil

Not a problem. svn:mergeinfo properties can only be changed using svn 1.5.x+ (preferably 1.7.x) clients as far as I know. Neither shouldn't they be changed manually too (unless...), instead svn merge --record-only (or the reverse-merge option) should be used.

I am aware of the fact you're using hg for committing to Redmine. I don't mind to keep track of these changes because hg cannot maintain this merge tracking info though and provide patches for it once in a while...

Most info about svn merging in general (thus not about hg -> svn) is at
http://svnbook.red-bean.com/en/1.7/svn.branchmerge.basicmerging.html#svn.branchmerge.basicmerging.mergeinfo.

Regards,

Mischa.

#3 - 2014-10-20 07:40 - Toshi MARUYAMA

Thank you for your reply.

I use CentOS6 and it's svn version 1.6.11.

```
$ LANG=C svn --version
svn, version 1.6.11 (r934486)
   compiled Mar  6 2014, 10:49:10
```

I tried applying attached patches.

```
$ LANG=C svn info
Path: .
URL: https://svn.redmine.org/redmine/trunk
Repository Root: https://svn.redmine.org/redmine
Repository UUID: e93f8b46-1217-0410-a6f0-8f06a7374b81
Revision: 13458
Node Kind: directory
Schedule: normal
Last Changed Author: marutosijp
Last Changed Rev: 13458
Last Changed Date: 2014-10-20 13:15:11 +0900 (Mon, 20 Oct 2014)

$ patch -p0 < ~/Desktop/1.\ reverse-merge-backport-commits-on-trunk_against_rails-4.1_at_r13451.patch
patch: **** Only garbage was found in the patch input.
$ svn status
$
```

How to change svn:mergeinfo properties by svn client?

#4 - 2014-10-24 05:41 - Mischa The Evil

- Related to Defect #18174: Rails-4.1 branch merge into trunk (r13482) reverts trunk commits added

#5 - 2014-10-27 07:52 - Mischa The Evil

Toshi MARUYAMA wrote:

> I tried applying attached patches.

That won't work. The patches (except 5. merge-missing-in-41-from-trunk_to_rails-4.1_at_r13451.patch which contains actual file changes [now integrated via r13504 for #18174]) contain the output of svn diff where no files in the repo are touched, only the values of the svn property svn:mergeinfo are changed (svn repo metadata). Using svn diff these svn property changes are included in the output diff, but patch doesn't understand this svn metadata as it works on files.

> How to change svn:mergeinfo properties by svn client?

In a normal situation where svn merge is used for (reverse-)merges these svn:mergeinfo values are updated automatically.
For this case, where we afterwards need to modify the svn:mergeinfo values only (watch for --record-only), I'll give some examples below.
What's important to note is that (generally) all these changes are made on a local checkout. As such they need to be committed to remote. This brings me to the drawback of changing these values afterwards in the here mentioned ways: it will create one or more *blank* commits changing only these properties. I don't know if it's worth the fuzz if the merge tracking features of svn are not actually used.
I think this should be discussed and decided among the lead and other committers first before these property changes get actually committed (also note that the patches I provided here are outdated already).

The examples:

- This can be used to fix point 1.1 in this issues description.
    - record-only reverse-merge commits r13407 and r13408 (and r13406 and r13405 since they are not existing on trunk) from remote (local might work too?) trunk to local checkout of rails-4.1 branch

    ```
    $ svn co https://svn.redmine.org/redmine/sandbox/rails-4.1 redmine-rails-4.1
    $ cd redmine-rails-4.1
    ```

```
$ svn merge -r 13408:13404 https://svn.redmine.org/redmine/trunk . --record-only
$ svn status
$ svn diff
```

- This can be used to fix point 1.3 in this issues description.
  - record-only merge commit r13296 from remote (local could work too ?) rails-4.1 branch to local checkout of trunk

```
$ svn co https://svn.redmine.org/redmine/trunk redmine-trunk
$ cd redmine-trunk
$ svn merge https://svn.redmine.org/redmine/sandbox/rails-4.1 -c 13296 . --record-only
$ svn status
$ svn diff
```

- This can be used to fix point 1.3 in this issues description in a **manual** way using svn propedit (with an identical result as the previous example).
  - manually change svn:mergeinfo property values using svn propedit command on local checkout of rails-4.1 branch

```
$ svn co https://svn.redmine.org/redmine/sandbox/rails-4.1 redmine-rails-4.1
$ cd redmine-rails-4.1
$ svn propedit svn:mergeinfo .
  {
    # default editor comes up...
    # manually change trunk line:
      - from: /trunk:13333-13439
      - to  : /trunk:13333-13404,13409-13439
    # exit editor
  }
$ svn status
$ svn diff
```

- additional command examples
  - more (read-only) commands useful when working with svn:mergeinfo properties, on local checkout of rails-4.1 branch

```
$ svn co https://svn.redmine.org/redmine/sandbox/rails-4.1 redmine-rails-4.1
$ cd redmine-rails-4.1
# retrieve svn:mergeinfo values using propget
$ svn propget svn:mergeinfo .
  >>
    /sandbox/custom_fields:12320-12324,12326-12399
    /trunk:13333-13439
  <<
# retrieve list of commits merged from trunk
$ svn mergeinfo --show-revs merged ^/trunk .
  >>
    > list of revisions merged from trunk:
    r13334
    r13335
    r13336
    ...
    see below
    ...
  <<
# retrieve list of commits eligible for merging from trunk
$ svn mergeinfo --show-revs eligible ^/trunk .
  >>
    > list of revisions eligible for merging from trunk:
    r13284
    r13285
    r13287
    ...
    see below
    ...
  <<
```

I'll add the full and *annotated* output of the last two commands collapsed due to the length. It's informative because it shows the actual problems with the merge tracking metadata of the rails-4.1 branch.

svn mergeinfo --show-revs merged ^/trunk .svn mergeinfo --show-revs merged ^/trunk .

```
>>
  r13334
  r13335
  r13336
  r13337
  r13338
  r13339
  r13340
  r13343
  r13344
  r13345
  r13346
  r13350
  r13351
  r13352
  r13353
  r13354
  r13357
  r13358
  r13359
  r13360
  r13361
  r13362
  r13363
  r13364
  r13365
  r13367
  r13368
  r13369
  r13374
  r13375
  r13378
  r13379
  r13381
  r13383
  r13385
  r13386
  r13390
  r13391
  r13392
  r13393
  r13394
  r13395
  r13396
  r13398
  r13399
  r13400
  r13401
  r13402
  r13403
  r13404
  -- rails-4.1 backport commits, reported in #18134 1.1
  r13407
  r13408
  --
  r13409
  r13410
  r13411
  r13412
  r13413
  r13415
  r13416
  r13417
  r13418
  r13419
  r13420
  r13421
  r13422
  r13423
  r13424
  r13425
  r13426
  r13427
  r13428
  r13429
```

```
    r13430
    r13432
    r13436
    r13439
  <<
```

svn mergeinfo --show-revs eligible ^/trunk .svn mergeinfo --show-revs eligible ^/trunk .

```
  >>
    -- reported in #18134 2.1 & #18174
    r13284
    r13285
    r13287
    r13299
    -- backport of r13296 from rails-4.1, reported in #18134 1.3
    r13301
    -- merged into rails-4.1 in r13304, reported in #18134 1.2
    r13302
    -- reported in #18134 2.1 & #18174
    r13303
    -- merged into rails-4.1 in r13307, reported in #18134 1.2
    r13306
    r13311
    -- reported in #18134 2.1 & #18174
    r13322
    r13323
    r13324
    r13325
    r13326
    r13327
    r13329
    r13330
    r13331
    -- merged into rails-4.1 in r13333, reported in #18134 1.2
    r13332
    -- trunk commits between rebase at r13439 and r13482 which were not in rails-4.1 branch when it got re-int
egrated with r13482 (after #18134 creation)
    -- TODO: these are still possibly corrupted by rails-4.1 branch merge -->> DONE: commits checked, they are
 not affected by the r13482 merge.
    r13449
    r13450
    r13451
    r13457
    r13458
    r13461
    r13464
    r13466
    r13467
    r13468
    r13471
    r13477
    r13478
    r13479
    -- merge and post-merge of rails-4.1 re-integration
    -- not a problem; rails-4.1 can now be considered stale
    r13482
    r13483
    r13484
    r13485
    r13486
    r13487
    r13488
    r13489
    r13490
    r13491
    r13492
    r13493
    r13495
    r13496
    r13497
    r13498
    r13499
    r13500
    r13501
```

```
    r13502
    r13503
    r13504
    r13505
    r13506
    r13508
    r13509
    r13510
  <<
```

There's one main reference to all the commands I used here: [Version Control with Subversion](#) (AKA the SVN book)

That's it. I think this explains the things pretty well.
If you have more questions, please feel free to ask.

Kind regards,

Mischa.

Files

1. reverse-merge-backport-commits-on-trunk_against_rails-4.1_at_r13451.patch	284 Bytes	2014-10-20	Mischa The Evil
2. merge-merged-in-41-from-trunk_to_rails-4.1_at_r13451.patch	288 Bytes	2014-10-20	Mischa The Evil
3. merge-backported-in-trunk-from-41_to_trunk_at_r13451.patch	294 Bytes	2014-10-20	Mischa The Evil
4. merge-merged-in-2.6-stable-from-trunk_to_2.6-stable_at_r13451.patch	270 Bytes	2014-10-20	Mischa The Evil
5. merge-missing-in-41-from-trunk_to_rails-4.1_at_r13451.patch	15.7 KB	2014-10-20	Mischa The Evil