

EOS - Bug #9230

Update EOS client from 0.3.95 to 0.3.118

06/17/2015 12:08 PM - Gerard Bernabeu Altayo

Status:	Resolved	Start date:	06/17/2015
Priority:	Normal	Due date:	
Assignee:	Gerard Bernabeu Altayo	% Done:	0%
Category:		Estimated time:	0.00 hour
Target version:		Spent time:	0.00 hour
Description			
EOS Fuse client 0.3.95 is not that stable on WN and LPC nodes, sometimes it hangs, some other times it has caching issues. I want to track the update (testing) in this ticket.			

History

#1 - 06/17/2015 12:14 PM - Gerard Bernabeu Altayo

I did an update on cmslpc37, where I had to restart EOS anyway (update does a restart of the daemon).

```
[root@cmslpc37 ~]# yum update --exclude=kernel*
Loaded plugins: priorities, security
Setting up Update Process
7743 packages excluded due to repository priority protections
Resolving Dependencies
--> Running transaction check
--> Package eos-client.x86_64 0:0.3.95-aquamarine.slc6 will be updated
--> Package eos-client.x86_64 0:0.3.118-aquamarine.slc6 will be an update
--> Package eos-fuse.x86_64 0:0.3.95-aquamarine.slc6 will be updated
--> Package eos-fuse.x86_64 0:0.3.118-aquamarine.slc6 will be an update
--> Finished Dependency Resolution
```

Dependencies Resolved

```
=====
=====
Package                Arch                Version                Repository            Size
=====
Updating:
eos-client              x86_64              0.3.118-aquamarine.slc6  eos_client            613 k
eos-fuse                x86_64              0.3.118-aquamarine.slc6  eos_client            416 k
=====
```

Transaction Summary

```
=====
Upgrade      2 Package(s)
```

Total download size: 1.0 M

Is this ok [y/N]: y

Downloading Packages:

```
(1/2): eos-client-0.3.118-aquamarine.slc6.x86_64.rpm | 613 kB  00:01
(2/2): eos-fuse-0.3.118-aquamarine.slc6.x86_64.rpm | 416 kB  00:01
-----
```

```
Total                270 kB/s | 1.0 MB  00:03
```

Running rpm_check_debug

Running Transaction Test

Transaction Test Succeeded

Running Transaction

```
Updating   : eos-client-0.3.118-aquamarine.slc6.x86_64      1/4
Updating   : eos-fuse-0.3.118-aquamarine.slc6.x86_64      2/4
Starting conditional EOS services
Cleanup    : eos-fuse-0.3.95-aquamarine.slc6.x86_64        3/4
Cleanup    : eos-client-0.3.95-aquamarine.slc6.x86_64      4/4
Verifying  : eos-fuse-0.3.118-aquamarine.slc6.x86_64      1/4
Verifying  : eos-client-0.3.118-aquamarine.slc6.x86_64    2/4
Verifying  : eos-client-0.3.95-aquamarine.slc6.x86_64     3/4
Verifying  : eos-fuse-0.3.95-aquamarine.slc6.x86_64       4/4
```

Updated:
eos-client.x86_64 0:0.3.118-aquamarine.slc6

eos-fuse.x86_64 0:0.3.118-aquamarine.slc6

Complete!
[root@cmslpc37 ~]#

In order for the server to get the new RPMs I did change the repo, now rolledback:

Notice: /Stage[main]/Rpmrepos::Eos_client/Yumrepo[eos_client]/baseurl: baseurl changed 'http://eos.cern.ch/rpms/eos-aquamarine/slc-6-x86_64/' to 'https://cms-install.fnal.gov/repo_mirror/eos_client/'

Clearly the client was restarted:

```
root 32639 0.0 0.0 740900 5332 ? Ssl 12:04 0:00 /usr/sbin/eosd /eos/uscms
-obig_writes,max_readahead=131072,max_write=4194304,fsname=eosstoreuser,allow_other rl=ro
[root@cmslpc37 ~]# tail /var/log/eos/fuse/fuse.log
[eofs_ll_read]: inode=15527538893783040 size=131072 off=173670400
[eofs_ll_read]: inode=15527538893783040 size=131072 off=173801472
[eofs_ll_read]: inode=15527538893783040 size=131072 off=173932544
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174063616
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174194688
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174325760
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174456832
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174587904
150617 12:04:21 time=1434560661.734730 func=xrd_init level=NOTE tid=00007f303f0fb780 source=xrdposix:3057 cache=true
size=300000000 cache-write=1 exec=0
[eofs_ll_read]: inode=27817607407075328 size=4096 off=0
[root@cmslpc37 ~]#
```

Also the issues we had on this node are gone, but that has more to do with the restart than anything else...

If it's stable for a couple days I'd like to update our local client repo.

#2 - 06/17/2015 12:15 PM - Gerard Bernabeu Altayo

By updating the client only it's not allowing to create links yet:

```
[gerard1@cmslpc37 gerard1]$ ln -s gba.22653 a
ln: creating symbolic link `a': Function not implemented
```

This is a good thing. It also logged something in the logs:

```
[root@cmslpc37 uscms]# tail /var/log/eos/fuse/fuse.log
[eofs_ll_read]: inode=15527538893783040 size=131072 off=173801472
[eofs_ll_read]: inode=15527538893783040 size=131072 off=173932544
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174063616
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174194688
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174325760
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174456832
[eofs_ll_read]: inode=15527538893783040 size=131072 off=174587904
150617 12:04:21 time=1434560661.734730 func=xrd_init level=NOTE tid=00007f303f0fb780 source=xrdposix:3057 cache=true
size=300000000 cache-write=1 exec=0
[eofs_ll_read]: inode=27817607407075328 size=4096 off=0
[eofs_ll_readdir]: failed for inode=5
[root@cmslpc37 uscms]#
```

#3 - 06/17/2015 01:26 PM - Gerard Bernabeu Altayo

I also updated cmseos38.fnal.gov

#4 - 06/17/2015 01:56 PM - Gerard Bernabeu Altayo

I've also updated one SL5 machine: cmslpc33.

Since this is an SL5 node, I've had to Create the yumrepo as well:

```
[root@cmslpc33 ~]# cat /etc/yum.repos.d/eos-client.repo
[eos-client-sl5]
name=EOS client
baseurl=http://eos.cern.ch/rpms/eos-aquamarine/slc-5-x86_64/
enabled=1
gpgcheck=0

yum update --exclude=kernel*
```

I've fixed the script that checks EOS too so that it also supports SL5 (no timeout binary there). Now the latest version lives in cmslpc33.

#5 - 06/18/2015 03:08 PM - Gerard Bernabeu Altayo

I have also updated the configuration to leave it very close to default on 'cmslpc38'. When restarting the node here is a good list of what it really does:

```
[root@cmslpc38 ~]# /etc/init.d/eosd restart
Stopping eosd:
[ OK ]

Starting eosd:
[ OK ]
EOS_FUSE_DEBUG      :0
EOS_FUSE_NOACCESS   :1
EOS_FUSE_KERNELCACHE :1
EOS_FUSE_DIRECTIO   :0
EOS_FUSE_CACHE      :1
EOS_FUSE_CACHE_SIZE :300000000
EOS_FUSE_CACHE_WRITE :1
EOS_FUSE_BIGWRITES  :0
EOS_FUSE_EXEC       :0
EOS_FUSE_LOCK_ENVIRONMENT :0
EOS_FUSE_NO_MT      :0
EOS_FUSE_RDAHEAD    :0
EOS_FUSE_RDAHEAD_WINDOW :131072
```

Vs the current setup:

```
[root@cmslpc26 ~]# service eosd restart
Stopping eosd:
[ OK ]

Starting eosd:
[ OK ]
EOS_FUSE_DEBUG      :0
EOS_FUSE_NOACCESS   :1
EOS_FUSE_KERNELCACHE :1
EOS_FUSE_DIRECTIO   :0
EOS_FUSE_CACHE      :1
EOS_FUSE_CACHE_SIZE :300000000
EOS_FUSE_CACHE_READ  :0
EOS_FUSE_CACHE_WRITE :1
EOS_FUSE_BIGWRITES  :1
EOS_FUSE_EXEC       :0
EOS_FUSE_LOCK_ENVIRONMENT :0
EOS_FUSE_NO_MT      :0
```

This change is not in puppet (yet), I want to evaluate how it works first.
I also opened a ticket to the EOS devs about EOS client stability issues:

<https://its.cern.ch/jira/browse/EOS-1178?filter=-2>

#6 - 06/24/2015 11:31 AM - Gerard Bernabeu Altayo

Updating client version on SL5 nodes:

```
[root@cmslpc35 ~]# echo -e '[eos-client-sl5]\nname=EOS
client\nbaseurl=http://eos.cern.ch/rpms/eos-aquamarine/slc-5-x86_64/\nenabled=0\nngpgcheck=0' > /etc/yum.repos.d/eos-client.repo; yum update -y
--exclude=kernel* --enablerepo=eos-client-sl5
```

I tried to do it in batch without much success:

```
[root@cmslpc35 ~]# for i in `seq 31 35` 42; do rsh cmslpc$i uname -a; done
Linux cmslpc31.fnal.gov 2.6.18-400.1.1.el5 #1 SMP Wed Dec 17 14:22:42 CST 2014 x86_64 x86_64 x86_64 GNU/Linux
Linux cmslpc32.fnal.gov 2.6.18-400.1.1.el5 #1 SMP Wed Dec 17 14:22:42 CST 2014 x86_64 x86_64 x86_64 GNU/Linux
Linux cmslpc33.fnal.gov 2.6.18-400.1.1.el5 #1 SMP Wed Dec 17 14:22:42 CST 2014 x86_64 x86_64 x86_64 GNU/Linux
Linux cmslpc34.fnal.gov 2.6.18-400.1.1.el5 #1 SMP Wed Dec 17 14:22:42 CST 2014 x86_64 x86_64 x86_64 GNU/Linux
Linux cmslpc35.fnal.gov 2.6.18-398.el5 #1 SMP Tue Sep 16 01:03:15 CDT 2014 x86_64 x86_64 x86_64 GNU/Linux
Linux cmslpc42.fnal.gov 2.6.18-400.1.1.el5 #1 SMP Wed Dec 17 14:22:42 CST 2014 x86_64 x86_64 x86_64 GNU/Linux
[root@cmslpc35 ~]# for i in `seq 31 35` 42; do rsh cmslpc$i echo -e '[eos-client-sl5]\nname=EOS
client\nbaseurl=http://eos.cern.ch/rpms/eos-aquamarine/slc-5-x86_64/\nenabled=0\nngpgcheck=0' > /etc/yum.repos.d/eos-client.repo; done
[root@cmslpc35 ~]# for i in `seq 31 35` 42; do rsh cmslpc$i yum update -y --exclude=kernel* --enablerepo=eos-client-sl5; done
Loaded plugins: kernel-module, priorities
```

Error getting repository data for eos-client-sl5, repository not found
Loaded plugins: kernel-module, priorities

```

Error getting repository data for eos-client-sl5, repository not found
Loaded plugins: kernel-module, priorities
http://cmsstor24.fnal.gov/install/rocks-dist/lan/x86\_64/repodata/repomd.xml: [Errno 4] IOError: <urlopen error (111, 'Connection refused')>
Trying other mirror.
http://cmsstor24.fnal.gov/install/rocks-dist/lan/i386/repodata/repomd.xml: [Errno 4] IOError: <urlopen error (111, 'Connection refused')>
Trying other mirror.
Excluding Packages in global exclude list
Finished
Setting up Update Process
Resolving Dependencies
--> Running transaction check
--> Package eos-client.x86_64 0:0.3.121-aquamarine.sl5 set to be updated
--> Package eos-fuse.x86_64 0:0.3.121-aquamarine.sl5 set to be updated
--> Finished Dependency Resolution
Beginning Kernel Module Plugin
Finished Kernel Module Plugin

```

Dependencies Resolved

```

=====
Package      Arch    Version                Repository             Size
=====
Updating:
eos-client   x86_64  0.3.121-aquamarine.sl5 eos-client-sl5         767 k
eos-fuse     x86_64  0.3.121-aquamarine.sl5 eos-client-sl5         500 k

```

```

Transaction Summary =====
Install    0 Package(s)
Update     2 Package(s)
Remove     0 Package(s)

```

Total download size: 1.2 M
Downloading Packages:

```

-----
Total                380 kB/s | 1.2 MB    00:03
Running rpm_check_debug
Running Transaction Test
Finished Transaction Test
Transaction Test Succeeded
Running Transaction
Updating   : eos-client                1/4
Updating   : eos-fuse                  2/4Starting conditional EOS services

Cleanup     : eos-client                3/4
Cleanup     : eos-fuse                  4/4

```

```

Updated:
eos-client.x86_64 0:0.3.121-aquamarine.sl5
eos-fuse.x86_64 0:0.3.121-aquamarine.sl5

```

Complete!
Loaded plugins: kernel-module, priorities

```

Error getting repository data for eos-client-sl5, repository not found
Loaded plugins: kernel-module, priorities
Config Error: File contains no section headers.
file: file:///etc/yum.repos.d/eos-client.repo, line: 1
'[eos-client-sl5]nname=EOS clientnbaseurl=http://eos.cern.ch/rpms/eos-aquamarine/slc-5-x86_64/nenabled=0ngpgcheck=0\n'
Loaded plugins: kernel-module, priorities

```

```

Error getting repository data for eos-client-sl5, repository not found
[root@cmslpc35 ~]#

```

I will stall this and test the new version that supports links, that will require a client update also so I better do it only once...

#7 - 07/17/2015 02:26 PM - Gerard Bernabeu Altayo

The client stall issues happen whenever the servers are unstable, newer versions of the eos-client (0.3.125) have introduced a decent amount of bugfixes in the client. As soon as the directory creation bug is solved we HAVE to update.

I just emailed CERN (Andreas) to know what version contains the bugfixes for the reported bugs he has been working on.

#8 - 07/28/2015 02:21 PM - Gerard Bernabeu Altayo

Testing with cmslpc28, which is not available to users:

```
[root@cmslpc28 ~]# tail -2 /var/log/puppet/puppet.log
2015-07-28T13:42:03.493913-05:00 cmslpc28 puppet-agent23185: Skipping run of Puppet configuration client; administratively disabled (Reason:
'Gerard playing with the EOS mountpoint to test eos-test');
2015-07-28T13:42:03.493940-05:00 cmslpc28 puppet-agent23185: Use 'puppet agent --enable' to re-enable.
[root@cmslpc28 ~]#
```

I've updated [root@cmslpc28 ~]# vim /etc/yum.repos.d/eos_client.repo to point to the eos-itb repo, then:

Dependencies Resolved

```
=====
```

Package	Arch	Version	Repository	Size
Installing:				
kernel	x86_64	2.6.32-504.30.3.el6	slf-security	29 M
kernel-devel	x86_64	2.6.32-504.30.3.el6	slf-security	9.4 M
Updating:				
eos-client	x86_64	0.3.125-aquamarine.slc6	eos_client	622 k
eos-fuse	x86_64	0.3.125-aquamarine.slc6	eos_client	432 k
kernel-firmware	noarch	2.6.32-504.30.3.el6	slf-security	14 M
kernel-headers	x86_64	2.6.32-504.30.3.el6	slf-security	3.4 M

Transaction Summary

```
=====
Install    2 Package(s)
Upgrade    4 Package(s)
```

#9 - 08/11/2015 03:49 PM - Gerard Bernabeu Altayo

- Status changed from New to Resolved

All clients have been updated to 0.3.125.