

Infrastructure - Story #2939

Determine cause and resolve errors being noticed during synchronization

2012-06-14 22:00 - Dave Vieglais

Status:	Closed	Start date:	2012-06-14
Priority:	Normal	Due date:	
Assignee:	Chris Jones	% Done:	100%
Category:	d1_synchronization	Estimated time:	0.00 hour
Target version:	Sprint-2012.29-Block.4.3		
Story Points:			
Description			
Some errors are being reported during synchronization of content in the production environment. The number is small, but cause is undetermined and may indicate a larger issue so the cause needs to be resolved or at least identified.			
For the KNB node, a total of 16954 records are reported, of which 16444 are synchronized to the CNs, leaving 510 that reported errors.			
A list of pids that were problematic is at: http://pastebin.com/h1UN5WeA			
Subtasks:			
Task # 2940: Addressing item #5 - Not Found Exceptions			Closed

History

#1 - 2012-06-14 22:29 - Chris Jones

- Status changed from New to In Progress

The following classes of errors are in the log:

1) SSLPeerUnverifiedException - this may have been during the OutOfMemory exception on KNB. Need to confirm.

```
[ERROR] 2012-06-14 05:27:12,018 (TransferObjectTask:createObject:523) Task-urn:node:KNB-doi:10.5063/AA/dpennington.153.1
[ERROR] 2012-06-14 05:27:17,288 (TransferObjectTask:createObject:523) Task-urn:node:KNB-doi:10.5063/AA/dpennington.156.2
[ERROR] 2012-06-14 05:34:04,849 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/dpennington.145.2
[ERROR] 2012-06-14 11:58:57,644 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/ve_hamilton.3.1
[ERROR] 2012-06-14 05:27:15,852 (TransferObjectTask:createObject:523) Task-urn:node:KNB-doi:10.5063/AA/dpennington.158.2
[ERROR] 2012-06-14 05:30:57,578 (TransferObjectTask:createObject:523) Task-urn:node:KNB-doi:10.5063/AA/dpennington.155.2
[ERROR] 2012-06-14 05:34:07,431 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/dpennington.155.2
[ERROR] 2012-06-14 05:27:13,561 (TransferObjectTask:createObject:523) Task-urn:node:KNB-doi:10.5063/AA/dpennington.144.2
[ERROR] 2012-06-14 05:27:14,899 (TransferObjectTask:createObject:523) Task-urn:node:KNB-doi:10.5063/AA/dpennington.142.3
[ERROR] 2012-06-14 05:29:30,523 (TransferObjectTask:createObject:523) Task-urn:node:KNB-doi:10.5063/AA/dpennington.144.2
[ERROR] 2012-06-14 05:34:08,352 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/dpennington.142.3
```

2) setObsoleteBy() fails during TransferObjectTask on updates

```
<?xml version="1.0" encoding="UTF-8"?>
```

The 'obsoleteByPid' must be provided as a parameter and was not.

See <https://redmine.dataone.org/issues/2418>

```
[ERROR] 2012-06-14 17:27:11,881 (TransferObjectTask:write:447) Task-urn:node:KNB-AKCRRAB.4.5
[ERROR] 2012-06-14 10:30:12,743 (TransferObjectTask:write:447) Task-urn:node:KNB-doi:10.5063/AA/nceasadmin.910.1
[ERROR] 2012-06-14 06:36:21,556 (TransferObjectTask:write:447) Task-urn:node:KNB-doi:10.5063/AA/ABS.4.3
[ERROR] 2012-06-14 10:30:13,150 (TransferObjectTask:write:447) Task-urn:node:KNB-doi:10.5063/AA/nceasadmin.805.2
```

3) SocketTimeoutException: Read timed out - this may have been during the OutOfMemory exception on KNB. Need to confirm.

```
[ERROR] 2012-06-14 05:28:04,280 (TransferObjectTask:createObject:523) Task-urn:node:KNB-doi:10.5063/AA/dpennington.162.2
[ERROR] 2012-06-14 05:28:33,270 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.162.3
[ERROR] 2012-06-14 05:29:38,876 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.162.3
[ERROR] 2012-06-14 05:30:12,654 (TransferObjectTask:createObject:523) Task-urn:node:KNB-doi:10.5063/AA/dpennington.145.2
[ERROR] 2012-06-14 05:30:40,760 (ObjectListHarvestTask:retrieve:220) urn:node:KNB- <?xml version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:30:44,620 (TransferObjectTask:retrieveSystemMetadata:261) Task-urn:node:KNB-doi:10.5063/AA/dpennington.162.3
[ERROR] 2012-06-14 05:31:15,240 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.162.3 <?xml
```


[ERROR] 2012-06-14 05:29:38,160 (TransferObjectTask:retrieveSystemMetadata:261) Task-urn:node:KNB-doi:10.5063/AA/dpennington.140.2
[ERROR] 2012-06-14 05:30:00,709 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.12.9 <?xml
version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:30:06,275 (TransferObjectTask:retrieveSystemMetadata:261) Task-urn:node:KNB-doi:10.5063/AA/dpennington.121.1
[ERROR] 2012-06-14 05:30:08,349 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.140.2 <?xml
version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:30:28,199 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.144.2 <?xml
version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:30:36,489 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.121.1 <?xml
version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:31:12,719 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.159.2
[ERROR] 2012-06-14 05:31:40,279 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.162.4
[ERROR] 2012-06-14 05:31:42,439 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.164.4
[ERROR] 2012-06-14 05:31:50,199 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.144.1
[ERROR] 2012-06-14 05:32:18,019 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.159.2
[ERROR] 2012-06-14 05:32:45,499 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.162.4
[ERROR] 2012-06-14 05:32:47,659 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.164.4
[ERROR] 2012-06-14 05:32:55,469 (TransferObjectTask:retrieveSystemMetadata:261) Task-urn:node:KNB-doi:10.5063/AA/dpennington.144.1
[ERROR] 2012-06-14 05:33:23,264 (TransferObjectTask:retrieveSystemMetadata:261) Task-urn:node:KNB-doi:10.5063/AA/dpennington.159.2
[ERROR] 2012-06-14 05:33:25,659 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.144.1 <?xml
version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:33:40,402 (ObjectListHarvestTask:retrieve:220) urn:node:KNB- <?xml version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:33:50,769 (TransferObjectTask:retrieveSystemMetadata:261) Task-urn:node:KNB-doi:10.5063/AA/dpennington.162.4
[ERROR] 2012-06-14 05:33:52,879 (TransferObjectTask:retrieveSystemMetadata:261) Task-urn:node:KNB-doi:10.5063/AA/dpennington.164.4
[ERROR] 2012-06-14 05:33:53,499 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.159.2 <?xml
version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:34:20,959 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.162.4 <?xml
version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:34:23,072 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.164.4 <?xml
version="1.0" encoding="UTF-8"?>
[ERROR] 2012-06-14 05:34:32,600 (TransferObjectTask:retrieveSystemMetadata:237) Task-urn:node:KNB-doi:10.5063/AA/dpennington.144.4
[ERROR] 2012-06-14 05:34:38,539 (SyncFailedTask:submitSynchronizationFailed:85) Task-urn:node:KNB-doi:10.5063/AA/dpennington.142.3 <?xml
version="1.0" encoding="UTF-8"?>

4) Failed to write triples into relation table ERROR: duplicate key value violates unique constraint "xml_relation_uk"

Unknown cause yet

[ERROR] 2012-06-14 08:25:16,835 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3625.3
[ERROR] 2012-06-14 08:25:21,220 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3650.3
[ERROR] 2012-06-14 08:25:24,624 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3650.1
[ERROR] 2012-06-14 08:25:30,776 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3843.3
[ERROR] 2012-06-14 08:27:17,667 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3843.5
[ERROR] 2012-06-14 09:36:58,779 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/knb2003.130.12
[ERROR] 2012-06-14 11:24:51,051 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.16
[ERROR] 2012-06-14 11:24:56,696 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.11
[ERROR] 2012-06-14 11:30:43,732 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.7
[ERROR] 2012-06-14 11:31:08,895 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.9
[ERROR] 2012-06-14 08:24:40,660 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3644.3
[ERROR] 2012-06-14 08:24:54,536 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3650.2
[ERROR] 2012-06-14 08:25:44,602 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3843.4
[ERROR] 2012-06-14 09:21:39,544 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/jlove.4.39
[ERROR] 2012-06-14 11:22:14,661 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.10
[ERROR] 2012-06-14 11:24:26,861 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.12
[ERROR] 2012-06-14 11:24:44,859 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.15
[ERROR] 2012-06-14 11:27:16,228 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.17
[ERROR] 2012-06-14 08:24:34,620 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3625.2
[ERROR] 2012-06-14 08:24:46,877 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3625.1
[ERROR] 2012-06-14 08:25:07,851 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3644.2
[ERROR] 2012-06-14 08:25:15,918 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/higgins.3644.1
[ERROR] 2012-06-14 09:04:09,355 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/jheisler.530.23
[ERROR] 2012-06-14 09:22:06,774 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/jlove.4.40
[ERROR] 2012-06-14 09:33:21,769 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/knb.291.1
[ERROR] 2012-06-14 09:36:40,992 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/knb2003.130.11
[ERROR] 2012-06-14 09:37:06,615 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/knb2003.130.13
[ERROR] 2012-06-14 11:24:29,789 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.13
[ERROR] 2012-06-14 11:24:33,365 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.14
[ERROR] 2012-06-14 11:30:52,207 (TransferObjectTask:write:450) Task-urn:node:KNB-doi:10.5063/AA/seahob.152.8

5) NotFound exceptions

During the call to TransferObjectTask.write(), a 404, detail 1340 exception is thrown. Unknown reason.

[ERROR] 2012-06-14 09:15:12,661 (TransferObjectTask:write:441) Task-urn:node:KNB-doi:10.5063/AA/kgordon.8.3
[ERROR] 2012-06-14 09:15:12,477 (TransferObjectTask:write:441) Task-urn:node:KNB-doi:10.5063/AA/kgordon.7.3

[ERROR] 2012-06-14 09:18:11,464 (TransferObjectTask:write:441) Task-urn:node:KNB-doi:10.5063/AA/kgordon.9.1
[ERROR] 2012-06-14 09:18:24,970 (TransferObjectTask:write:441) Task-urn:node:KNB-doi:10.5063/AA/kgordon.7.7
[ERROR] 2012-06-14 09:18:26,343 (TransferObjectTask:write:441) Task-urn:node:KNB-doi:10.5063/AA/kgordon.8.1
[ERROR] 2012-06-14 10:30:17,429 (TransferObjectTask:write:441) Task-urn:node:KNB-doi:10.5063/AA/nceasadmin.813.1
[ERROR] 2012-06-14 10:30:17,737 (TransferObjectTask:write:441) Task-urn:node:KNB-doi:10.5063/AA/nceasadmin.814.1

6) NotAuthorized

These are all associated with ESA objects, and were likely left over in the logs from when we didn't have the client cert worked out with the CN. These likely can be ignored.

Task-urn:node:ESA-esa.100.1
Task-urn:node:ESA-esa.103.1
Task-urn:node:ESA-esa.105.1
Task-urn:node:ESA-esa.29.2
Task-urn:node:ESA-esa.43.1
Task-urn:node:ESA-esa.43.2
Task-urn:node:ESA-esa.45.3
Task-urn:node:ESA-esa.45.5
Task-urn:node:ESA-esa.47.1
Task-urn:node:ESA-esa.49.1
Task-urn:node:ESA-esa.49.2
Task-urn:node:ESA-esa.49.3
Task-urn:node:ESA-esa.58.1
Task-urn:node:ESA-esa.74.1
Task-urn:node:ESA-esa.75.1
Task-urn:node:ESA-esa.76.1
Task-urn:node:ESA-esa.78.1
Task-urn:node:ESA-esa.96.1
Task-urn:node:ESA-esa_reviews.11.1
Task-urn:node:ESA-esa_reviews.14.1
Task-urn:node:ESA-esa_reviews.17.1
Task-urn:node:ESA-esa_reviews.19.1
Task-urn:node:ESA-esa_reviews.23.1
Task-urn:node:ESA-esa_reviews.6.1
Task-urn:node:ESA-esa_reviews.8.1
Task-urn:node:ESA-esa_reviews.9.1
Task-urn:node:ESA-esa.105.2
Task-urn:node:ESA-esa.29.1
Task-urn:node:ESA-esa.36.1
Task-urn:node:ESA-esa.37.1
Task-urn:node:ESA-esa.41.3
Task-urn:node:ESA-esa.45.2
Task-urn:node:ESA-esa.45.4
Task-urn:node:ESA-esa.47.2
Task-urn:node:ESA-esa.47.3
Task-urn:node:ESA-esa.50.1
Task-urn:node:ESA-esa.50.3
Task-urn:node:ESA-esa.62.1
Task-urn:node:ESA-esa.62.2
Task-urn:node:ESA-esa.63.1
Task-urn:node:ESA-esa.70.1
Task-urn:node:ESA-esa.71.1
Task-urn:node:ESA-esa.79.1
Task-urn:node:ESA-esa.80.1
Task-urn:node:ESA-esa.82.1
Task-urn:node:ESA-esa.95.2
Task-urn:node:ESA-esa_reviews.10.1
Task-urn:node:ESA-esa_reviews.1.1
Task-urn:node:ESA-esa_reviews.18.1
Task-urn:node:ESA-esa_reviews.20.1
Task-urn:node:ESA-esa_reviews.2.1
Task-urn:node:ESA-esa_reviews.24.1
Task-urn:node:ESA-esa_reviews.25.1
Task-urn:node:ESA-esa_reviews.26.1
Task-urn:node:ESA-esa_reviews.3.1
Task-urn:node:ESA-esa.101.1
Task-urn:node:ESA-esa.102.1
Task-urn:node:ESA-esa.104.1
Task-urn:node:ESA-esa.18.1
Task-urn:node:ESA-esa.27.1
Task-urn:node:ESA-esa.38.1
Task-urn:node:ESA-esa.41.1
Task-urn:node:ESA-esa.41.2
Task-urn:node:ESA-esa.42.1

Task-urn:node:ESA-esa.45.1
Task-urn:node:ESA-esa.50.2
Task-urn:node:ESA-esa.50.4
Task-urn:node:ESA-esa.52.1
Task-urn:node:ESA-esa.54.1
Task-urn:node:ESA-esa.72.1
Task-urn:node:ESA-esa.73.1
Task-urn:node:ESA-esa.77.1
Task-urn:node:ESA-esa.83.1
Task-urn:node:ESA-esa_reviews.12.1
Task-urn:node:ESA-esa_reviews.13.1
Task-urn:node:ESA-esa_reviews.15.1
Task-urn:node:ESA-esa_reviews.16.1
Task-urn:node:ESA-esa_reviews.21.1
Task-urn:node:ESA-esa_reviews.22.1
Task-urn:node:ESA-esa_reviews.27.1
Task-urn:node:ESA-esa_reviews.4.1
Task-urn:node:ESA-esa_reviews.5.1
Task-urn:node:ESA-esa_reviews.6.2
Task-urn:node:ESA-esa_reviews.7.1
Task-urn:node:ESA-esa_reviews.8.2

7)

#2 - 2012-06-15 17:35 - Chris Jones

All errors in the [#4](#) category above "Failed to write triples into relation table ERROR: duplicate key value violates unique constraint "xml_relation_uk") can effectively be ignored except for knb.291. The others are pre-release EML beta6 documents that have duplicate triple statements in them relating access control modules to the main data file. There should only be one triple statement in each, so these are XMLSchema-valid, EML invalid documents.

#3 - 2012-06-15 17:37 - Chris Jones

Issues in (3) and (6) above can be ignored. They are due to communications errors with the KNB member node. The system metadata of each object will be updated so a reharvest is induced.

#4 - 2012-06-15 17:39 - Chris Jones

Errors associated with (2) above (fail to setObsoletdBy()) should be resolved by Robert in teh CN REST Proxy code. See [#2940](#). These objects will be reharvested.

#5 - 2012-06-16 23:33 - Ben Leinfelder

Chris Jones wrote:

Errors associated with (2) above (fail to setObsoletdBy()) should be resolved by Robert in teh CN REST Proxy code. See [#2940](#). These

objects will be reharvested.

Hi Robert,

I just want you to know another scenario when I am seeing this on cn-stage (running the 1.0 release). Here is the scenario:

I update the `obsoletedBy` and `dateModified` fields on the MN's system metadata. The CN picks up this change during synchronization. I see the error in the CN processing logs.

I was trying to find the bug documenting that you re-fixed this, but couldn't find it. So please close this and point me to the bug that (I believe you have fixed) for 1.0.1 release.

I'd like to test the fix in cn-stage when we get that stable deb package built. I like that there are some concrete documents to test with in that environment and will keep it that way.

Thanks!

#6 - 2012-06-19 05:38 - Robert Waltz

- Status changed from *In Progress* to *Closed*

#7 - 2012-06-19 05:39 - Robert Waltz

- Status changed from *Closed* to *In Progress*

#8 - 2012-06-19 05:40 - Robert Waltz

- Target version changed from *Sprint-2012.23-Block.3.4* to *Sprint-2012.25-Block.4.1*

- Milestone changed from *CCI-1.0.1* to *CCI-1.0.2*

#9 - 2012-07-09 14:06 - Dave Vieglais

- Target version changed from *Sprint-2012.25-Block.4.1* to *Sprint-2012.29-Block.4.3*

- Milestone changed from *CCI-1.0.2* to *CCI-1.0.3*

#10 - 2012-08-16 21:48 - Dave Vieglais

- Status changed from *In Progress* to *Closed*

Sync seems to be working ok now.