

Infrastructure - Task #2940

Story # 2939 (Closed): Determine cause and resolve errors being noticed during synchronization

Addressing item #5 - Not Found Exceptions

2012-06-14 23:35 - Dave Vieglais

Status:	Closed	Start date:	2012-06-14
Priority:	Normal	Due date:	
Assignee:	Ben Leinfelder	% Done:	100%
Category:	Metacat	Estimated time:	0.00 hour
Target version:	Sprint-2012.29-Block.4.3	Story Points:	
Milestone:	CCI-1.0.2		
Product Version:	*		
Description			
Only place where that exception detail code appears is:			
metacat/src/edu/ucsb/nceas/metacat/dataone/D1NodeService.java: throw new NotFound("1340", "The object with the provided			
" + "identifier was not found.");			
metacat/src/edu/ucsb/nceas/metacat/dataone/D1NodeService.java: throw new NotFound("1340", "The provided identifier			
was invalid.);			
From the parent task:			
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			

History

#1 - 2012-06-14 23:58 - Ben Leinfelder

- Status changed from New to Closed

These all seem fine and do not give a 404 for either /meta or /object. Two are private, which should also not pose a problem for the CN.

doi:10.5063/AA/kgordon.8.3 -- private
doi:10.5063/AA/kgordon.7.3 -- fine
doi:10.5063/AA/kgordon.9.1 -- fine
doi:10.5063/AA/kgordon.7.7 -- fine
doi:10.5063/AA/kgordon.8.1 -- private
doi:10.5063/AA/nceasadmin.813.1 -- fine
doi:10.5063/AA/nceasadmin.814.1 -- fine

#2 - 2012-06-15 00:06 - Ben Leinfelder

- Status changed from Closed to In Progress

- Assignee changed from Ben Leinfelder to Robert Waltz

These "1340" NotFound exceptions are only raised by Metacat in the delete() and archive() methods. Why would either of these methods be called during sync?

#3 - 2012-06-15 02:20 - Robert Waltz

- Assignee changed from Robert Waltz to Ben Leinfelder

On a MemberNode, MNStorage.archive() is a method that may set the archive flag on object's systemMetadata record. If the archive flag is set on the MemberNode, then it will cause an update to the systemMetadata which will cause the record to be synchronized. In order for the updated archive flag on the MemberNode's systemMetadata to be acted upon by the CN, the CN's systemMetadata record for the object will also have to have its archive flag set. Therefore, Synchronization calls CNCore.archive() to effect that change.

CNCore.archive() is only called when 1) an update to a MemberNode's systemMetadata has been detected 2) the updated SystemMetadata has the archive flag set to true 3) the CN's copy of the systemMetadata has the archive flag null or set to false.

#4 - 2012-06-15 02:33 - Robert Waltz

All of these errors occurred on cn-unm-1. There is what Synchronization was doing:

Gets a task to synchronize, attempts to pull SystemMetadata from CN. It finds the SystemMetadata, and determines it to be an update because the checksum of the MemberNode SystemMetadata and the SystemMetadata on the CN to be the same. It determines that the archive flag has been set on the MN's SystemMetadata and therefore the change should be reflected on the CN. Metacat returns with an error.

```
[ INFO] 2012-06-14 10:30:17,561 (TransferObjectTask:write:376) Task-urn:node:KNCB-doi:10.5063/AA/nceasadmin.814.1 Getting sysMeta from CN
[ INFO] 2012-06-14 10:30:17,564 (TransferObjectTask:write:398) Task-urn:node:KNCB-doi:10.5063/AA/nceasadmin.814.1 Pid Exists. Must be an
Update
[ INFO] 2012-06-14 10:30:17,564 (TransferObjectTask:write:419) Task-urn:node:KNCB-doi:10.5063/AA/nceasadmin.814.1 Update sysMeta because
checksum is same
[ INFO] 2012-06-14 10:30:17,565 (TransferObjectTask:updateSystemMetadata:579) Task-urn:node:KNCB-doi:10.5063/AA/nceasadmin.814.1 Update
Archived
[ERROR] 2012-06-14 10:30:17,737 (TransferObjectTask:write:441) Task-urn:node:KNCB-doi:10.5063/AA/nceasadmin.814.1
<?xml version="1.0" encoding="UTF-8"?>
```

The object with the provided identifier was not found.

#5 - 2012-06-15 03:07 - Ben Leinfelder

For this example,
<https://knb.ecoinformatics.org/knb/d1/mn/v1/meta/doi:10.5063/AA/nceasadmin.814.1>
the archived flag is not set (which is correct).
Nor is the obsoletedBy property (which is NOT correct).
See related bug about missing obsoletedBy information: [#2938](#)

CN.archive() does much more (in Metacat internals) than just set the archive flag on the SystemMetadata. I would not expect the CN to call this when it could just call CN.updateSystemMetadata() with the new information it received.

I would like to correct the SystemMeta entries in [#2938](#) so that they correctly reflect the revision history.

#6 - 2012-06-19 05:40 - Robert Waltz

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

#7 - 2012-07-06 16:27 - Ben Leinfelder

- *Target version changed from Sprint-2012.25-Block.4.1 to Sprint-2012.27-Block.4.2*

#8 - 2012-07-09 15:41 - Dave Vieglaiss

- *Status changed from In Progress to Closed*

Closing this task for now.

There may still be an issue to resolve here, but it seems to be an edge case that affects a small number of records. Something to watch nonetheless.