

Infrastructure - Task #8060

CN failed to call MN.synchronizationFailed method for the arctic data center and knb mn

2017-04-04 18:45 - Jing Tao

Status:	Closed	Start date:	2017-04-04
Priority:	Normal	Due date:	
Assignee:	Jing Tao	% Done:	100%
Category:	d1_synchronization	Estimated time:	0.00 hour
Target version:	CCI-2.3.3	Story Points:	
Milestone:	None		
Product Version:	*		
Description			
Chris and Bryce found: So I'm trying to understand why it didn't sync, but moreover why calls to MN.syncFailed() are failing on the MNs And it's happening since March 19th on both KNB and ADC			
Related issues:			
Related to Infrastructure - Bug #8064: ExceptionHandler class should handle t...		Closed	2017-04-07

History

#1 - 2017-04-04 18:58 - Jing Tao

- Target version changed from CCI-2.3.4 to CCI-2.3.3

#2 - 2017-04-04 18:58 - Jing Tao

- Related to Bug #7954: SyncFailedTask.submitSynchronizationFailed does not provide cert when connecting to MN added

#3 - 2017-04-05 00:02 - Jing Tao

After digging around, I found that:
metacat 20170404-23:36:12: [DEBUG]: The xml information (error message) in the temp file is
<?xml version="1.0" encoding="UTF-8"?>

Synchronization task of [PID::] sla.5.1 [::PID] failed. Cause: IdentifierNotUnique: The requested identifier sla.5.1 is already used by another object and therefore can not be used for this object. Clients should choose a new identifier that is unique and retry the operation or use CN.reserveIdentifier() to reserve one.

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

Synchronization task of [PID::] sla.5.1 [::PID] failed. Cause: IdentifierNotUnique: The requested identifier sla.5.1 is already used by another object and therefore can not be used for this object. Clients should choose a new identifier that is unique and retry the operation or use CN.reserveIdentifier() to reserve one.

```
[edu.ucsb.nceas.metacat.restservice.v2.MNResourceHandler:collectSynchronizationFailed:1653]
metacat 20170404-23:36:12: [DEBUG]: we are going to deserialize xml file to a java object ----
[edu.ucsb.nceas.metacat.restservice.v2.MNResourceHandler:collectSynchronizationFailed:1655]
[Fatal Error] :5:6: The processing instruction target matching "[xX][mM][lL]" is not allowed.
metacat 20170404-23:36:12: [ERROR]: D1ResourceHandler: Serializing exception with code 500: The processing instruction target matching
"[xX][mM][lL]" is not allowed. [edu.ucsb.nceas.metacat.restservice.D1ResourceHandler:serializeException:456]
```

The duplicated xml were sent to Metacat. So Metacat can't deserialize the xml file to an object.

#4 - 2017-04-05 19:30 - Jing Tao

It turned out that the method `domToString` on the class `BaseException` used a shared `StringWriter` object. If the `SynchronizationFailed` object serializes (using the `domToString` method) twice, the xml presentation result will duplicate. The code has existed since 2011. But the `MN.synchronizationFailed` still worked since we only call the method once during the process. However, a debug statement which serializes the `SynchronizationFailed` object was added recently, so the object was serialized twice during the sync. So the duplicated xml was sent to the MN.

#5 - 2017-04-05 23:05 - Rob Nahf

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

- % Done changed from 0 to 30

committed the change to `d1_synchronization` trunk and 2.3 branch to eliminate the initial deserialization that was causing the double xml message body in the `synchronizationFailed` message body.

#6 - 2017-04-07 22:06 - Jing Tao

- Related to deleted (Bug #7954: `SyncFailedTask.submitSynchronizationFailed` does not provide cert when connecting to MN)

#7 - 2017-04-07 22:07 - Jing Tao

- Related to Bug #8064: `ExceptionHandler` class should handle the new `identifier` attribute in the xml representation of exceptions added

#8 - 2017-04-07 22:11 - Jing Tao

For the branch 2.3, the fixing works.

However, for the trunk (2.4), there is a change that the attribute "pid" has been replaced by "identifier". This change was half done (serialization). The deserialization hasn't been done.

See <https://redmine.dataone.org/issues/8064>.

When this bug is fixed, we can close the ticket.

#9 - 2017-04-13 22:15 - Jing Tao

- % Done changed from 30 to 100

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

The ticket 8064 is fixed. So both trunk and branch 2.3 work.