

Infrastructure - Task #1045

Feature # 1044 (Closed): Local data cacheing for java libclient

Modify libclient_java to support local data cacheing

2010-11-09 17:05 - Matthew Jones

Status:	Closed	Start date:	
Priority:	Normal	Due date:	
Assignee:	Matthew Jones	% Done:	100%
Category:	d1_libclient_java	Estimated time:	0.00 hour
Target version:	Sprint-2011.44-Block.6	Story Points:	
Milestone:	CCI-1.0.0		
Product Version:	*		
Description			
Related issues:			
Blocks Infrastructure - Task #1043: Modify R client to access data from DataO...		Closed	
Blocked by Infrastructure - Task #1046: Integrate Data Manager library to lib...		Rejected	

History

#1 - 2011-10-26 18:06 - Matthew Jones

- Status changed from New to In Progress

#2 - 2011-11-05 17:05 - Matthew Jones

- Category set to d1_libclient_java

- % Done changed from 0 to 100

- Milestone set to CCI-1.0.0

Implementation of the LocalCache (ticket [#1044](#)) for d1_libclient_java that provides a local memory and disk cache for objects retrieved from DataONE MemberNodes completed. Implementation uses the Java JCS system, which handles all of the heavy lifting. Objects are cached in memory up to a configurable limit, and then on disk up to another configurable limit. There is a new property 'D1Client.useLocalCache' that is checked when any D1Node is instantiated -- if true, then the local cache is utilized for get() calls, but if false then it is ignored and the service call is made regardless. SystemMetadata can also be cached, but because SystemMetadata is mutable, this is not done by default -- a specific method call needs to be made to cache SystemMetadata, and then it should only be done for short periods of time if determined appropriate by the application. By default SystemMetadata is not cached.

Unit tests were added to test the caching system locally. Tests need to be added to the integration test suite, but as that test suite has not been passing for months, I was unable to determine if the new features broke anything.

#3 - 2011-11-05 17:08 - Matthew Jones

- Status changed from In Progress to Closed