

Infrastructure - Story #1952

SerialVersion in SystemMetadata needs to be incremented with each Update

2011-10-28 23:08 - Robert Waltz

| | |
|--|----------------------------------|
| Status: Closed | Start date: 2011-11-01 |
| Priority: Normal | Due date: |
| Assignee: Robert Waltz | % Done: 100% |
| Category: Documentation | Estimated time: 0.00 hour |
| Target version: Sprint-2011.46-Block.6 | |
| Story Points: | |
| Description | |
| <p>The serialVersion in SystemMetadata allows for consistency between updates of systemMetadata</p> <p>systemMetadata can only be updated on the CN systemMetadata is managed by Hazelcast</p> <p>Every operation that manipulated SystemMetadata on the CN will follow the pattern:</p> <pre>lock(); get(); increment(); put(); unlock();</pre> <pre>if (hzSystemMetadata.tryLock(pid, 500L, TimeUnit.MILLISECONDS)) { SystemMetadata systemMetadata = hzSystemMetadata.get(pid); do something here</pre> <pre> systemMetadata.setSerialVersion (systemMetadata.getSerialVersion().add(BigInteger.ONE)); hzSystemMetadata.put(systemMetadata); hzSystemMetadata.unlock(pid); }</pre> <p>and of course you'll want the above in a try catch block too, so that if an exception is raised, a lock will still be released</p> <p>Locking will be performed on the hzSystemMetadata HazelcastMap</p> <p>Get will be performed against the hzSystemMetadata HazelcastMap</p> <p>increment is an operation performed on the SystemMetadata.serialVersion.</p> <p>Put will be performed against the hzSystemMetadata HazelcastMap</p> <p>Unlocking will be performed on the Hazelcast Lock structure</p> | |
| Subtasks: | |
| Task # 1979: Update synchronization to use the locking and serialversion algorithm | Closed |
| Task # 1980: Update replication to use the locking and serialVersion algorithm | Closed |
| Task # 1981: Update CNReplication implementation to use the locking and serialVersion a... | Closed |
| Task # 1991: Update CNReplication and CNAuthorization interfaces with serialVersion change | Closed |
| Task # 1992: Update CNode implementation with serialVersion Additions | Closed |
| Task # 1993: Update Metacat implementation to support serialVersion additions | Closed |
| Task # 1994: Update CNReplication proxy classes to support serialVersion additions | Closed |
| Task # 1995: Update Metacat auth implementation to support serialVersion additions | Closed |
| Task # 1996: Update CNAuthorization proxy classes to support serialVersion additions | Closed |
| Task # 1982: Update CNAuthorization implementation to use the locking and serialVersion... | Closed |
| Related issues: | |

History

#1 - 2011-11-07 18:09 - Dave Vieglais

- Target version changed from *Sprint-2011.44-Block.6* to *Sprint-2011.45-Block.6*
- Position set to 1

#2 - 2011-11-15 03:34 - Dave Vieglais

- Target version changed from *Sprint-2011.45-Block.6* to *Sprint-2011.46-Block.6*
- Position deleted (9)
- Position set to 1

#3 - 2011-11-15 17:52 - Robert Waltz

- Status changed from *New* to *Closed*