# Infrastructure - Story #1296

# Setting replication status in system metadata as part of synchronization process.

2011-02-04 20:29 - Dave Vieglais

Status: Closed Start date: 2011-02-04

Priority: High Due date:

Assignee: Robert Waltz % Done: 100%

Category: d1\_synchronization Estimated time: 0.00 hour

Target version: Sprint-2011.07

# Story Points: Description

The CNs maintain the definitive copies of system metadata and should set replication status information based on the synchronization and replication state of the referenced object. The replication is used to support the resolve() method

The purpose of the SystemMetadata.replica entry is to record the locations from which the object can be retrieved. After initial synchronization, the replica information for data objects (stored only on Member Nodes) should include a reference to the Member Node holding the content.

For science metadata objects, the replica information should include the CN information as well since the content can be retrieved from the CNs as well. There is potential for a race condition if all of the CN locations are recorded in the replica status, so the replica location should consider all of the CNs as a single entry using a more abstract reference such as "cn.dataone.org" to the coordinating nodes rather than a specific node such as "cn-ucsb-1.dataone.org".

In summary, after synchronization for a data object, the system metadata document held by the CN must refer to the member node holding the object.

For science metadata, the system metadata must refer to both the member node and the coordinating node (in the abstract sense).

#### Related issues:

Related to Infrastructure - Task #1348: place cn as a replicated node Closed 2011-02-14

## History

### #1 - 2011-02-14 23:46 - Dave Vieglais

- Target version changed from Sprint-2011.06 to Sprint-2011.07
- Position set to 3

# #2 - 2011-02-24 21:13 - Robert Waltz

- Status changed from New to Closed
- Assignee set to Robert Waltz
- Milestone set to CCI-0.5

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