

## Infrastructure - Bug #2356

### No Nodeld for the virtual CN represented by the RR DNS entry for CNs

2012-02-21 17:19 - Dave Vieglais

<b>Status:</b>	Closed	<b>Start date:</b>	2012-02-21
<b>Priority:</b>	High	<b>Due date:</b>	
<b>Assignee:</b>	Robert Waltz	<b>% Done:</b>	100%
<b>Category:</b>	d1_synchronization	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	Sprint-2012.09-Block.2.1	<b>Story Points:</b>	
<b>Milestone:</b>	CCI-1.0.0		
<b>Product Version:</b>	*		

#### Description

During synchronization a `entry` is made for science metadata content indicating that the content has been replicated to a Coordinating Node. However, since the content is actually replicated to all CNs within the environment only a single `entry` is made. The `nodeld` for this replica is undefined since it should refer to the "virtual" CN indicating by the RR DNS entry for the environment so that the object can be retrieved from any CN. However, there is no `nodeID` that corresponds to the RR DNS entry.

See [#2355](#) for example.

Possible resolutions:

1. Create a new `nodeID` that refers to the RR DNS entry
2. Use a "magic" value for `nodeID` that is interpreted by the `resolve()` method to mean any CN
3. Use the `nodeID` of the CN where synchronization was made
4. Add `entries` for each CN holding the object.

Option 4 is perhaps most appropriate, and the `entry` should be made when the object appears on the respective CN.

Option 3 is the simplest fix that will enable `resolve()` to function correctly.

Option 2 is a hack, and may have consequences for replica management.

Option 1 is probably asking for trouble.

Suggestion is to modify synchronization to use the current `nodeld` (i.e. option 3) until a better solution is determined.

#### Related issues:

Related to Infrastructure - Bug #2355: Incorrect node id added to replica ent...	Closed	2012-02-21
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#### History

##### #1 - 2012-02-24 17:57 - Robert Waltz

- Status changed from New to In Progress

##### #2 - 2012-02-27 18:20 - Dave Vieglais

- Target version changed from Sprint-2012.07-Block.1.4 to Sprint-2012.09-Block.2.1

- Position set to 37

##### #3 - 2012-02-29 06:13 - Robert Waltz

- Status changed from In Progress to Closed

Actually Option [#1](#) is what we decided to do a few months ago and what has been implemented. I never populated the `nodelist` until now because we didn't have round robin.

We need to be able to access the RR DNS entry from the `libclient` packages, so we have to have it in the `node list` regardless.

We can change the entry pretty easily through the `postinst` scripts if we need to implement option 3.

Option 4 would be very easy to implement as well and would need no configuration changes. The issue with [#4](#) is when we add a new CN. We would

then have to modify all systemMetadata to include the new CN as an entry.

Having the round robin entry as the node ensures that a client can retrieve the data from any CN.