

Kepler - Bug #2248

Need to merge corresponding mutable and immutable subclasses of DomainObject

11/05/2005 02:41 PM - Timothy McPhillips

Status:	Resolved	Start date:	11/05/2005
Priority:	Normal	Due date:	
Assignee:	Timothy McPhillips	% Done:	0%
Category:	core	Estimated time:	0.00 hour
Target version:	1.0.0alpha9	Spent time:	0.00 hour
Bugzilla-Id:	2248		

Description

In alpha7, complex, domain-specific objects passed between actors in collection-oriented workflows were implemented in mutable and immutable pairs, analogous to Java's StringBuffer and String classes. By convention, only instances of the immutable versions of these class (which could be constructed from instances of the mutable versions) were passed between actors. This approach now appears to be overly complicated.

This issue has been addressed, for now, by adding two methods to the DomainObject interface (and skeletal implementation): setWriteLock() and assertNotWriteLocked(). The former method is called automatically when a DomainObject is added to a collection. By convention, the latter method should be called from all public methods of domain objects that change the state of the instance; a runtime exception is then thrown if setWriteLock() was previously called on that instance.

(The previous approach still may be used in cases where it makes sense.)

So far, the following pairs of classes have been merged:

CharacterMatrix, CharacterMatrixBuffer
DistanceMatrix, DistanceMatrixBuffer
WeightVector, WeightVectorBuffer
ProteinAtom, ProteinAtomBuffer
ProteinSequence, ProteinSequenceBuffer

The following pairs of classes still need to be merged:

Tree, TreeBuffer
TreeNode, TreeNodeBuffer

History

#1 - 02/08/2006 11:41 PM - Timothy McPhillips

The classes Tree and TreeBuffer have been merged, as have TreeNode and TreeNodeBuffer.

#2 - 03/27/2013 02:19 PM - Redmine Admin

Original Bugzilla ID was 2248