THE SWKM MAIN MEMORY MODEL API REFERENCE (version 2.0)

VIEW NAME	LEVEL OF OPERATIONS	METHOD NAME	DESCRIPTION/METHOD SIGNATURE
THE OBJECT BASED VIEW	MODEL LEVEL OPERATIONS	*Get containers:*	• A container given its URI: IRDF_Container getContainer(String container_uri) • All containers of the model: HashMap<java.lang.String,IRDF_Container> getContainers()
		Get namespaces:	• A namespace given its URI: IRDF_Namespace getNamespace(java.lang.String namespace_uri) • All namespaces of the model: HashMap <java.lang.String,IRDF_Namespace> getNamespaces()
		Get graphspaces:	• A specific one given its URI: IRDF_GraphspacegetGraphspace(java.lang.String graphspace_uri) • All the graphspaces: HashMap <java.lang.String,IRDF_Graphspace> getGraphspaces()
		Get class instances (user defined):	• A specific a class instance given its URI: IRDF_ClassInstance getClassInstance (String class_instance_uri) • All class instances: HashMap <java.lang.String,IRDF_ClassInstance> getClassInstances()
		Get property instances (user defined):	• A specific a property instance given its URI: java.util.Collection getPropertyInstance(java.lang.String property_instance_uri) • All property instances: MultiMap getPropertyInstances()
	NAMESPACE LEVEL OPERATIONS	*Get classes:*	• A specific class given its URI: IRDF_Class getClass(String class_uri) • Get all classes of the namespace: HashMap getClasses()
		Get properties:	• A property given its URI: IRDF_Property getProperty(java.lang.String property_uri) • All properties of the namespace: HashMap getProperties() • Get all namespaces this namespace depends on: HashMap <java.lang.String,IRDF_Namespace> getNamespaceDependencies()
	CLASS LEVEL OPERATIONS	*Get the ancestors of this class:*	• Direct: Collection<IRDF_Class> getDirectAncestors() • All: Collection<IRDF_Class> getAncestors()

		Get descendents of this class:	- Direct: Collection<IRDF_Class> getDirectDescendants() - All: Collection<IRDF_Class> getDescendants()
		Check if Class:	- Has a domain class with URI property_uri: isDomainOf(java.lang.String a_property_uri). - Has a range class with URI class_uri: boolean isRangeOf(java.lang.String a_property_uri) - Is ancestor of another Class: boolean isAncestorOf(IRDF_Class rdf_class) - Is descendant of another Class: boolean isDescendantOf(IRDF_Class rdf_class) - Is a subClass of a Class: boolean isSubClassOf(java.lang.String class_uri) - Is a superClass of a Class: booleanisSuperClassOf(java.lang.String class_uri)
	PROPERTY LEVEL OPERATIONS	*Get the ancestors of this Property:*	- Direct: Collection<IRDF_Property> getDirectAncestors() - All: Collection<IRDF_Property> getAncestors()
		Get descendents of this Property:	- Direct: Collection<IRDF_Property> getDirectDescendants() - All: Collection<IRDF_Property> getDescendants()
		Get all the domain classes of this Property:	Collection <IRDF_Class> getDomains()
		Get all the range classes of this Property:	Collection <IRDF_Class> getRanges()
		Check if property:	- Has a domain class with URI property_uri: boolean hasDomain(java.lang.String a_class_uri) - Has a range class with URI class_uri: boolean hasRange(java.lang.String a_class_uri) - Ancestor of another property: boolean isAncestorOf(IRDF_Property rdf_property) - Descendant of another property: boolean isDescendantOf(IRDF_Property rdf_property) - Subproperty of a property: boolean isSubPropertyOf(java.lang.String property_uri) - Superproperty of a property: boolean isSuperPropertyOf(java.lang.String property_uri)
	CLASS INSTANCE LEVEL OPERATIONS	*Get all types of this instance recursively:*	- Collection<IRDF_Resource> getAllTypes(IRDF_Model model) - Retrieves the types defined for this resource from the model: Collection<IRDF_Resource> getTypes()
THE TRIPLE BASED VIEW	**MODEL LEVEL OPERATIONS**	*Get all triples of a specific type contained in the model:*	- HashMap<java.lang.String,IRDF_ClassInstance> getClassInstances()
		Get a specific triple contained in the model according to its	- IRDF_Comment getCommentWithSubjectAndObject(IRDF_Resource subject, IRDF_Literal object)

	object/ subject relationships:	
	Get all triples contained in the Model as Strings:	• java.util.Collection<IRDF_Triple> toTriples()
NAMESPACE LEVEL OPERATIONS	*Get all triples of a specific type contained in the model:*	• i.e. MultiMap getComments()
	Get a specific triple contained in the model according to its object/ subject relationships:	• i.e. java.util.Collection getComment(IRDF_Resource rdf_resource)
	Get all triples contained in the Namespace as Strings:	• Collection toTriples()
GRAPHSPACE LEVEL OPERATIONS	*Get a collection of objects in which:*	• Rdf_property "participates" : i.e. Collection getRange(IRDF_Propertyrdf_property) • Rdf_class "participates" : i.e. Collection getSubClass(IRDF_Class rdf_class) • Rdf_resource "participates" : i.e. Collection getComment(IRDF_Resource rdf_resource)
	Get Property Instances:	• A specific Property Instance : IRDF_PropertyInstance getPropertyInstance (java.lang.String property_instance_uri) • All property instances of the Graphspace : MultiMapgetPropertyInstances()
	Get the Graphspaces this Graphspace depends on:	• HashMap<java.lang.String,IRDF_Graphspace> getGraphspaceDependencies()
	Get all the NameSpaces this Graphspace depends on:	• HashMap<java.lang.String,IRDF_Namespace> getNamespaceDependencies()
	Get all triples contained in the graphspace as Strings:	• Collection toTriples()
CLASS LEVEL OPERATIONS	*Get all the properties with this Class as Domain:*	• Collection getDomainOf()
	Get all the properties this class is in range:	• Collection getRangeOf()
	Get subclass triples of this Class:	• All subclass triples: Collection<IRDF_SubClass> getAllSubClassesTriples() • Direct: Collection <IRDF_SubClass >

		getSubClassesTriples()
	Get superclass triples of this Class:	• All superclass triples: Collection<IRDF_SubClass> getAllSuperClassesTriples() • Direct: Collection getSuperClassesTriples()
	Get all the domain triples with this Class as object:	• Collection<IRDF_Domain> getDomainOfTriples()
PROPERTY LEVEL OPERATIONS	*Get all the triples with a Property as subject that belong to a Domain:*	• Collection<IRDF_Domain> getDomainsTriples()
	Get all triples contained in the graphspace as Strings:	• Collection toTriples()
	Get all the triples with a Property as subject that belong to a Range:	• Collection<IRDF_Range> getRangesTriples()
	Get all the Subproperty triples of this Property:	• Collection<IRDF_SubProperty> getAllSubPropertiesTriples()
	Get all the direct Subproperty triples of this Property:	• Collection<IRDF_SubProperty> getSubPropertiesTriples()
	Get all Superproperty triples of this Property:	• Collection<IRDF_SubProperty> getAllSuperPropertiesTriples()
	Get all the direct Superproperty triples of this Property:	• Collection<IRDF_SubProperty> getSuperPropertiesTriples()
CLASS INSTANCE LEVEL OPERATIONS	*Retrieves the type triples defined for this resource from the model:*	• Collection<IRDF_Type> getTypesTriples()