YesWorkflow Model OWL

1. YW Model Vocabulary and Definition:

Entity	Attributes		Description	
yw: Program	rdf: type	yw: Program	Define type of the entity is Program	
	rdfs: label		Program name	
	rdfs: comment		Program description	
	yw: hasSubProgram	yw: Program	What are the sub programs?	
	yw: hasInPort	yw: Port	What are the ports that coming in the program?	
	yw: hasOutPort	yw: Port	What are the ports that going out from the program?	
	rdf: type	yw: Workflow	Define type of the entity is Workflow	
yw: Workflow	rdfs: label		Workflow name	
	rdfs: comment		Workflow description	
	yw: hasProgram	yw: Program	What are the programs belong to the workflow?	
	yw: hasInPort	yw: Port	What are the ports that coming in the workflow?	
	yw: hasOutPort	yw: Port	What are the ports that going out from the program?	
yw: Port	rdf: type	yw: Port	Define type of the entity is Port	
	rdfs: label		Port name normally is the name appears before the @as annotation	
	yw: portType		Values "in"/"out"/"param"	
	yw: connectsTo	yw: Data	What data is connect to the port?	
yw: Data	rdf: type	yw: Data	Define type of the entity is Data	
	rdfs: label		Name of the data: normally is the name appears after the @as annotation	
	rdfs: comment		Description of the data	
	(rdf: type	yw:DataFile)	Optional attribute: if the data has URI associated with it, this attribute will indicate that the data has a data file, which stores the URI.	
	(yw: filePath)		Optional attribute: URI template	
	(yw: isAssociatedWith	yw: Data)	Optional attribute: if the URI include information about other data associated with the file, it will indicate here.	

2. YW Model – ProvONE Model mapping:

YW Entity	YW - Attributes		ProvONE entity	ProvONE Attributes	
yw: Program	rdf: type	yw: Program	p1: Program	rdf: type	p1: Program
	rdfs: label		-	rdfs: label	
	rdfs: comment		-	rdfs: comment	
	yw: hasSubProgram	yw: Program	-	p1: hasSubProgram	p1: Program
	yw: hasInPort	yw: Port		p1: hasInPort	p1: Port
	yw: hasOutPort	yw: Port	-	p1: hasOutPort	p1: Port
yw: Workflow	rdf: type	yw: Workflow	p1: Workflow	rdf: type	p1: Workflow
	rdfs: label		-	rdfs: label	
	rdfs: comment		-	rdfs: comment	
	yw: hasProgram	yw: Program	_	p1: hasSubProgram	p1: Program
	yw: hasInPort	yw: Port	_	p1: hasInPort	p1: Port
	yw: hasOutPort	yw: Port	-	p1: hasOutPort	p1: Port
yw: Port	rdf: type	yw: Port	p1: Port	Rdf: type	p1: Port
	rdfs: label			rdfs: label	
	yw: portType		-	yw: portType	
	yw: connectsTo	yw: Data	-	p1: connectsTo	p1: Channel
yw: Data	rdf: type	yw: Data	p1: Channel	rdf: type	p1: Channel
	rdfs: label		-	rdfs: label	
	rdfs: comment		-	rdfs: comment	
	(rdf: type	yw:DataFile)	-	(rdf: type	p1: Data)
	(yw: filePath)		-	(yw: filePath)	
	(yw: isAssociatedWith	yw: Data)	-	(yw: isAssociatedWith	n p1: Channel)