YesWorkflow Model OWL

1. YW Model Vocabulary and Definition:

Class	Properties	Properties Values	Properties 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?
yw: Workflow	rdf: type	"yw: Workflow"	Define type of the entity is 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	"in"/"out"/"param"	Indicate the port type: either input, output or parameter
	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
	(yw: filePath)	""	Optional attribute: URI template of the data if there is any.
	(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	
	(yw: filePath)			(yw: filePath)	
	(yw: isAssociatedWith	yw: Data)		(yw: isAssociatedWith	p1: Channel)