

YesWorkflow Model OWL

1. YW Model Vocabulary and Definition:

Class	Property	Property Value	Property Description
yw:Program	rdf:type	"yw:Program"	Declare the type of the entity: Program
	rdfs:label	""	Program name
	rdfs:comment	""	Program description
	yw:hasSubProgram	yw:Program	Sub programs of current program
	yw:hasInPort	yw:Port	Ports coming into the program
	yw:hasOutPort	yw:Port	Ports going out from the program
yw:Workflow	rdf:type	"yw:Workflow"	Declare the type of the entity: Workflow
	rdfs:label	""	Workflow name
	rdfs:comment	""	Workflow description
	yw:hasProgram	yw:Program	Programs that belong to the workflow
	yw:hasInPort	yw:Port	Ports coming into the workflow
	yw:hasOutPort	yw:Port	Ports going out from the workflow
yw:Port	rdf:type	"yw:Port"	Declare the type of the entity: Port
	rdfs:label	""	Port name that appears before @as tag
	yw:portType	"in"/"out"/"param"	Port type: input, output or parameter
	yw:connectsTo	yw:Data	Data that the port connects to
yw:Data	rdf:type	"yw:Data"	Declare the type of the entity: Data
	rdfs:label	""	Data name that appears after @as tag
	rdfs:comment	""	Description of the data
	(yw:filePath)	""	Optional attribute: URI template of the data
	(yw:isAssociatedWith)	(yw:Data)	Optional attribute: Other data that current URI template (contains "{}") is associated with

2. YW Model – ProvONE Model mapping:

YW Class	YW Property	ProvONE class	ProvONE Property
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)

3. YW Recon Vocabulary and Definition:

Class	Property	Property Value	Property Description
yw:Resource	rdf:type	"yw:Resource"	Declare the type of the entity: Resource
	rdfs:label	""	Specific file path and name of the Resource
	yw:instantiates	yw:Data	Data entity that Resource instantiates from
	yw:hasURIVariable	yw:URIVariable	URI variables that Resource is associated with
yw:URIVariable	rdf:type	"yw:URIVariable"	Declare the type of the entity: URIVariable
	yw:variableName	""	The name of the variable in the URI template
	yw:variableValue	""	The value of the variable in the Resource