UML Class Diagram — 25.05.2007

Template «interface» (UserAttributeContainer)
- +getID():long
- +getName(): String
- +getProcessType(): String
- +getVersion(): String
- +getSupervisorAgent():int
- +getSupervisorOrgPosition():int
- +getParameters(accessType: AccessType):Set<Parameter>
- +getDeltaLayer(): TemplateDeltaLayer
- +getNode(nodeID:int): Node
- +getEdge(srcNodeID:int, destNodeID:int, type: EdgeType):Edge
- +getDataElement(dataElementID:int): DataElement
- +getDataEdge(nodeID:int, dataElementID:int, type: AccessType):DataEdge
- +getDataElement(nodeID:int, connector:int): DataElement
- +getStartNode(): Node
- +getEndNode(): Node
- +getNodes(): Set<Node>
- +getDataElements(): Set<DataElement>
- +getEdgeStructure(edgeTypes: EdgeType...):Set<StructuredEdge>
- +getDataEdgeStructure(): Set<StructuredDataEdge>
- +getNodeType(nodeID:int): NodeType
- +getNodeTopologicalID(nodeID:int):int
- +getNodeIDForTopologicalID(topologicalNodeID:int):int
- +getNodeBranchID(nodeID:int):int
- +getNodeSelectorPredicate(nodeID:int): String
- +getNodeSplitNode(nodeID:int):int
- +getNodeCorrespondingBlockNode(nodeID:int):int
- +getReadDataElementsForNode(nodeID:int):int[]
- +getWrittenDataElementsForNode(nodeID:int):int[]
- +getWritingNodesForDataElement(dataElementID:int):int[]
- +getReadingNodesForDataElement(dataElementID:int):int[]
- +getConnector(nodeID:int, dataElementID:int, dataEdgeType: AccessType):
- +getUnconnectedConnectors(nodeID:int, dataEdgeType: AccessType):int[]
- +getDisabledConnectors(nodeID:int, accessType: AccessType):int[]
- +getNodesWithActivityTemplate(activityTemplateVersionID:long):int[]
- +getNodesInArea(first:int, last:int, includeBlocks:boolean):int[]
- +getSuccByEdgeType(nodeID:int, type: ProcessConstants.EdgeType...):int[]
- +getPredByEdgeType(nodeID:int, type: EdgeType...):int[]
- +isTransPredOf(currentNodeID:int, potentialPredecessorID:int, edgeType: Ed
- +getMinBlock(nodes: Set<Node>):int[]

TemplateStatus «interface»
- +getTemplateID():long
- +isTopLevelUsable():boolean
- +isOutdated(subprocessScope:boolean):boolean
- +isInstanceable(subprocessScope:boolean):boolean
- +isDerivable():boolean
- +getUsageAsSubprocess(): TemplateUsage
- +areInstancesMigratableTo(subprocessScope:boolean):boolean
- +areInstancesChangeable(subprocessScope:boolean):boolean
- +getBuildtimeState(): TemplateBuildtimeState
- +setTopLevelUsage(useAsTopLevel:boolean):void
- +setSubprocessUsage(usage: TemplateUsage):void
- +release():void
- +setOutdated(outdated:boolean, subprocessScope:boolean):void
- +setDerivable(derivable:boolean):void
- +setInstanceable(instanceable:boolean, subprocessScope:boolean
- +setInstancesMigratableTo(instancesMigratableTo:boolean, subpr
- +setInstancesChangeable(instancesChangeable:boolean, subproce

ChangePrimitives «interface»
- +startTransaction():void
- +endTransaction():void
- +setName(name: String):void
- +setSupervisorAgent(supervisorAgentID:int):void
- +setSupervisorOrgPosition(supervisorOrgPositionID:int):void
- +setInputParameters(inputParameters: Set<Parameter>):void
- +setOutputParameters(outputParameters: Set<Parameter>):void
- +addNode(node: Node):Node
- +updateNode(node: Node , nodeProperties: NodeProperty...):Node
- +removeNode(nodeID:int):void
- +setNodeType(nodeID:int, type: NodeType):void
- +setSelectorPredicate(nodeID:int, selectorPredicate: String):void
- +setCorrespondingBlockNode(split:int, join:int):void
- +setBranchID(startNodeID:int, endNodeID:int, newIDNecessary:boolean, existingID:int):void
- +setSplitNodeID(startNodeID:int, endNodeID:int, splitNodeID:int):void
- +mapParameter(node:int, parameterName: String , connector:int):void
- +reMapDataElement(dataElementID:int, nodeID:int, type: AccessType ,parameterName: String):void
- +addDisabledConnector(nodeID:int, connectorID:int):void
- +removeDisabledConnector(nodeID:int, connectorID:int):void
- +updateExecutableBusinessProcess(nodeID:int, ebp: ExecutableBusinessProcess , ebpProperties: ExecutableBusinessProce
- +addEdge(srcNodeID:int, destNodeID:int, edge: Edge):Edge
- +updateEdge(srcNodeID:int, destNodeID:int, edge: Edge , edgeProperty: EdgeProperty...):Edge
- +removeEdge(srcNodeID:int, destNodeID:int, edgeType: EdgeType):void
- +addDataElement(dataElement: DataElement):DataElement
- +updateDataElement(dataElement: DataElement , dataElementProperties: DataElementProperty...):DataElement
- +removeDataElement(dataElementID:int):void
- +addDataEdge(node:int, connector:int, dataElement:int, dataEdge: DataEdge):DataEdge
- +addDataEdge(node:int, dataElement:int, dataEdge: DataEdge):DataEdge
- +updateDataEdge(nodeID:int, dataElementID:int, accessType: AccessType , dataEdge: DataEdge , dataEdgeProperties:
- +removeDataEdge(node:int, dataElement:int, dataEdgeType: AccessType):void
- +updateUserAttribute(container: UserAttributeContainer , name: String , value: String):void
- +removeUserAttribute(container: UserAttributeContainer , name: String):void
- +addMovedNode(node:int):void

DeltaLayer «interface» «meta»
- +getPredByEdgeType(scope: DeltaScope , nodeID:int, types: EdgeType...):int[]
- +getSuccByEdgeType(scope: DeltaScope , nodeID:int, types: EdgeType...):int[]
- +getNodes(scope: DeltaScope):int[]
- +getEdges(scope: DeltaScope , edgeTypes: EdgeType...):Set<StructuredEdge>
- +getDataEdges(scope: DeltaScope):Set<StructuredDataEdge>
- +getDataElements(scope: DeltaScope):int[]
- +getChangedNodeProperties(nodeID:int): NodeProperty[]
- +getChangedEdgeProperties(sourceNodeID:int, destinationNodeID:int, edgeType: EdgeType):EdgePro
- +getChangedEdgeProperties(nodeID:int, dataElementID:int, dataEdgeType: AccessType):DataEdgePro
- +getChangedDataElementProperties(dataElementID:int): DataElementProperty[]
- +getChangedEBPProperties(nodeID:int): ExecutableBusinessProcessProperty[]

InstanceDeltaLayer «interface»

ChangeableTemplate «interface»

TemplateDeltaLayer «interface» (UserAttributeContainer)
- +getParentToChildIDMapping(): Map<Integer,Integer>
- +getChildNodeID(parentNodeID:int):int
- +getParentNodeID(childNodeID:int):int

ChangeableInstance «interface»
- +getDeltaLayer(): InstanceDeltaLayer
- +setNodeState(nodeID:int, state: NodeState):void
- +setNodeIteration(nodeID:int, iteration:int):void
- +changeInitiatorAgent(newInitiatorAgentID:int):void
- +changeInitiatorOrgPosition(initiatorOrgPositionID:int):void

Instance «interface» (UserAttributeContainer)
- +getID():long
- +getName(): String
- +isModified():boolean
- +getTemplate(): Template
- +getSupervisorAgent():int
- +getSupervisorOrgPosition():int
- +getInitiatorOrgPosition():int
- +getInitiatorAgent():int
- +getParentEBPReference(): EBPInstanceReference
- +getNodeState(nodeID:int): NodeState
- +getExecutionMode(nodeID:int):ExecutionMode
- +getNodeIteration(nodeID:int):int
- +getNodeLWPInstanceID(nodeID:int): Set<Long>
- +getEdgeState(srcNodeID:int, destNodeID:int, edgeType: EdgeType):EdgeState
- +getActivityAgent(nodeID:int):int
- +getActivityAgentOrgPosition(nodeID:int):int

DataValueInstance «interface»
- +getDataValue(dataElementID:int): Object
- +isDataValueAdeptNull(dataElementID:int):boolean
- +isDataValueApplicationNull(dataElementID:int):boolean

InstanceStatus «interface»
- +getInstanceID():long
- +getMigrationStatus(): InstanceMigrationStatus
- +getExecutionStatus(): InstanceExecutionStatus
- +setMigrationStatus(migrationStatus: InstanceMigrationStatus):void
- +setExecutionStatus(executionStatus: InstanceExecutionStatus):void

InstanceHistories «interface»
- +getInstanceID():long
- +getChangeHistoryXML(): Document
- +getDataHistoryXML(dataElementID:int): Document
- +getExecutionHistoryXML(): Document

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UserAttributeContainer
«interface»
DataElement

+getID():int
+getName(): String
+getType(): AdeptDataType
+getUserDefinedType(): String
+getDescription(): String
+getIdentifierID():long
+isVirtual():boolean
+isFormEnabled():boolean
+isStreamReplaceable():boolean

Serializable
«interface»
Parameter

+getName(): String
+getIdentifierID():long
+getType(): AdeptDataType
+getUserDefinedType(): String
+getDescription(): String
+isOptional():boolean
+isVirtual():boolean
+getActivityTypeParameterConfiguration(): Map<String,S...
+isFormEnabled():boolean
+isStreamReplaceable():boolean

UserAttributeContainer
Serializable
«interface»
ExecutableBusinessProcess

+getName(): String
+getParameter(name: String , accessType: AccessType):Parameter
+getParameters(accessType: AccessType):Set<Parameter>
+getActivityTypeID(): String
+getExecutionControlProperties(): ExecutionControlProperties

UserAttributeContainer
«interface»
DataEdge

+getType(): AccessType
+isOptional():boolean

UserAttributeContainer
«interface»
Edge

+getType(): EdgeType
+getEdgeCode():int

«interface»
LightWeightProcess

+getTemplateID():long

«interface»
Activity

+getActivityTemplateVersionID():long
+getTestMode(): TestMode
+getOperationName(): String
+isAbstract():boolean
+getConfigurationNamespace(): String
+getActivityTypeConfiguration(): Map<String,String>
+getApplicationConfiguration(): Map<String,String>
+getTestActivityTypeConfiguration(): Map<String,String>
+getTestApplicationConfiguration(): Map<String,String>
+getCodeDescriptor(): Set<CodeDescriptor>
+getGUIContextID(): String

«interface»
StructuredDataEdge

+getDataEdge(): DataEdge
+getNodeID():int
+getConnectorID():int
+getDataElementID():int
+getDataEdgeType(): AccessType

«interface»
StructuredEdge

+getEdge(): Edge
+getSourceNodeID():int
+getDestinationNodeID():int
+getEdgeType(): EdgeType

«interface»
DecisionActivity

+getOutputParameters(): Set<Parameter>
+getDecisionParameter(): Parameter
+getDecisionLabel(decisionID:int): String
+getDecisionIDs():int[]

UserAttributeContainer
Serializable
«interface»
Node

+getID():int
+getName(): String
+getExecutableBusinessProcess(): ExecutableBusinessProcess
+getConnector(parameterName: String , accessType: AccessType):int
+getParameterName(connectorID:int): String
+getConnectorMapping(accessType: AccessType):Map<String,Integer>
+getDescription(): String
+getStaffAssignmentRule(): String

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tools

InducedGraph
TestNodeRelations
TestSuiteTools
ProcessGraphPredicates
TestPMTCommonSplitNode
ProcessModelTools
ConvertFiles
ConvertActivityTemplateToActivity
NodeRelations
TestProcessModelTools
TestProcessGraphPredicates

xml

ProcessModelXMLImportTools
ProcessModelXMLExportTools
TestProcessModelXML
ProcessModelXMLConstants
ProcessModelXMLImport
ProcessModelXMLExport

Serializable

«interface»
EBPInstanceReference

+getInstanceID():long
+getNodeID():int
+isActivity():boolean
+getNodeIteration():int
+getExecutionManagerURI():   URI
+getRuntimeManagerURI():   URI
+equals(otherObject: Object):boolean
+hashCode():int

«interface»
ProcessModelFactory

+setCreateChangeable(changeable:boolean):void
+createNode(id:int, name: String , description: String , staffAssignmentRule: String , executableBusinessProcess: ExecutableBusinessProcess   , parameterConnectorMapping: Map<AccessType,Map<String,Integer>>   , userAttributes: Map<String,String>):Node
+createEdge(type: EdgeType , edgeCode:int, userAttributes: Map<String,String>   ):Edge
+createTemplate(id:long, name: String , processType: String , supervisorAgentID:int, supervisorOrgPositionID:int, version: String , inputParameters: Set<Parameter> , outputParameters: Set<Parameter> , deltaLayer: TemplateDeltaLayer , nodes: Map<Integer,Node> , dataElements: Map<Integer...
+createTemplateDeltaLayer(newNodes: Map<Integer,Node> , deletedNodes: Map<Integer,Node> , changedNodes: Map<Integer,Node> , changedNodeProperties: Map<Integer,Set<NodeProperty>>   ):TemplateDeltaLayer
+createTemplateStatus(templateID:long, buildtimeState: TemplateBuildtimeState , subprocessUsage: TemplateUsage , topLevelUsage:boolean, derivable:boolean, tlOutdated:boolean, spOutdated:boolean, tlInstanceable:boolean, spInstanceable:boolean, tlInstancesMigratableTo:boolean, spInstancesMigratableTo:boolea...
+createInstance(id:long, name: String , isModified:boolean, template: Template , supervisorAgentID:int, supervisorOrgPositionID:int, initiatorOrgPositionID:int, initiatorAgentID:int, ebpInstanceReference: EBPInstanceReference , nodeStates: Map<Integer,NodeState> , nodeIterations: Map<In...
+createDataValueInstance(id:long, name: String , isModified:boolean, template: Template , supervisorAgentID:int, supervisorOrgPositionID:int, initiatorOrgPosition: String , initiatorAgent: String , ebpInstanceReference: EBPInstanceReference , nodeStates: Map<Integer,NodeState> , nodeIteratic...
+createInstanceDeltaLayer(newNodes: Map<Integer,Node> , deletedNodes: Map<Integer,Node> , changedNodes: Map<Integer,Node> , changedNodeProperties: Map<Integer,Set<NodeProperty>>   ):InstanceDeltaLayer
+createInstanceHistories(instanceID:long, executionHistoryXML: Document , changeHistoryXML: Document):InstanceHistories
+createEBPInstanceReference(superInstanceID:long, nodeID:int, iterationID:int):   EBPInstanceReference
+createInstanceStatus(instanceID:long, migrationStatus: InstanceMigrationStatus , executionStatus: InstanceExecutionStatus   ):InstanceStatus
+createParameter(name: String , type: AdeptDataType , userDefinedType: String , identifierID:long, optional:boolean, description: String , virtual:boolean, formEnabled:boolean, streamReplaceable:boolean, activityTypeConfiguration: Map<String,String>):Parameter
+createDataElement(id:int, name: String , type: AdeptDataType , description: String , userDefinedType: String , identifierID:long, virtual:boolean, formEnabled:boolean, streamReplaceable:boolean, userAttributes: Map<String,String>):DataElement
+createDataEdge(type: AccessType , optional:boolean, userAttributes: Map<String,String>):DataEdge
+createLightWeightProcess(templateID:long, name: String , inputParameters: Set<Parameter> , outputParameters: Set<Parameter> , userAttributes: Map<String,String>):LightWeightProcess
+createActivity(activityTemplateVersionID:long, name: String , inputParameters: Set<Parameter> , outputParameters: Set<Parameter> , executionControlProperties: ExecutionControlProperties , testMode: TestMode , operationName: String , activityTypeID: String , userAttributes: Map<String,Stri...
+createNullTemplate():   Template
+createStructuredEdge(edge: Edge , sourceNodeID:int, destinationNodeID:int, type: EdgeType):StructuredEdge
+createStructuredDataEdge(dataEdge: DataEdge , nodeID:int, connectorID:int, dataElementID:int, type: AccessType):StructuredDataEdge
+createStructuralNodeData(nodeID:int, nodeType: NodeType , topologicalID:int, branchID:int, splitNodeID:int, correspondingBlockNodeID:int, selectorPredicate: String):StructuralNodeData

+StructuralNodeData

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