

Services Composition elements  $\pi$ -SCM  $\rightarrow$   $\pi$ -Pews

SOURCE $\pi$ -SCM META-MODEL	Mapping Rules	TARGET PEWSModel
<div>Action<div></div></div>	<div>- An Action in the source model corresponding to an <i>external</i> Business Collaborator is mapped to an Operation in target model</div> <div>- The Action:name in the source model is transformed into Operation:name in the target model</div>	<div><div>Operation</div><div>alias : EString</div></div>
<div>Service Activity<div></div></div>	<div>- The ServiceActivity in the source model is mapped to a CompositeOperation in target model when more than one Actions are called.</div> <div>- If CompositeOperation is generated for a given ServiceActivity then the ServiceActivity:name in the source model is mapped to CompositionOperation:name in the target model</div>	<div><div>TypeOperation</div><div>name : EString</div></div> <div></div> <div><div>CompositeOperation</div></div>
<div>Control Nodes<div></div></div>	<div>- The ControlNode in the source model is mapped to a Operator in target model. According to the type of ControlNode (merge, decision, join, fork) the expression of the CompositeOperation is:</div> <div><ul style="list-style-type: none"><li>Sequence if no ControlNode is specified;</li><li>Parallel - Sequence for a ControlNodes pattern fork - join;</li><li>Choice – Sequence for a ControlNodes pattern decision - merge</li></ul></div>	<div><div>Operator</div><div>nameOperator : OperatorType</div></div>
<div>Business Collaborator<div></div></div>	<div>A BusinessCollabortor:isExternal in the source model generates a NameSpaces in the target model</div>	<div><div>Namespace</div><div>name : EString</div><div>WDSLAddress : EString</div></div>

Rule elements  $\pi$ -SCM  $\rightarrow$   $\pi$ -Pews

SOURCE $\pi$ -SCM META-MODEL	Mapping Rules	TARGET PEWSModel
<div><div>Rule</div><div>name : EString</div><div>event : EventType</div><div>condition : EString</div><div>action : EString</div></div>	<div>The Rule's attribute event in the source model is transformed into an Event:type of the target model. In this case attribute is mapped to an entity with an attribute. The Event Type of a Rule in the target model is determined by the Rule type:</div> <div><ul style="list-style-type: none"><li>Event Type of a Precondition Rule is <i>ActivityPrepared</i>;</li><li>Event Type of a Postcondition Rule is <i>ActivityPrepared</i></li></ul></div> <div>Event Type of a TimeRestriction Rule is <i>TermActivity</i></div>	<div><div>&lt;&lt;enumeration&gt;&gt;</div><div> EventType</div><div>ActivityPrepered</div><div>TermActivity</div><div>Activity</div></div> <div><div>Event</div><div>type : EventType</div></div>
<div><div>Rule</div><div>name : EString</div><div>event : EventType</div><div>condition : EString</div><div>action : EString</div></div>	<div>The Rule's attribute condition in the source model is transformed into a Condition:expression in the target model. In this case, an attribute is mapped into an entity with an attribute</div>	<div><div>Condition</div><div>expression : EString</div></div>
<div><div>Rule</div><div>name : EString</div><div>event : EventType</div><div>condition : EString</div><div>action : EString</div></div>	<div>The Rule:action in the source model is transformed in an Action:type in the target model. The attribute action is mapped to an entity with an attribute. In the target model an action is executed according to the rule condition value (true/false)</div>	<div><div>Action</div><div>act : EString</div></div>

A-Policy elements  $\pi$ -SCM  $\rightarrow$   $\pi$ -Pews

SOURCE $\pi$ -SCM METAMODEL	Mapping Rules	TARGET PEWSModel
<div><div>Policy</div><div>name : EString</div></div>	<div>- Every Policy associated to an element (Business Collaborator, Service Activity, Action) in the source model becomes an A-Policy associated to the corresponding element in the target model</div> <div>- The name attribute of a Policy in the source model becomes an Apolicy:name of the target model</div>	<div><div>APolicy</div><div>name : EString</div></div>
<div><div>Variable</div><div>name : EString</div><div>valeu : EString</div></div>	<div>- Every Variable associated to a Policy in the source model becomes a Variable associated to an A-Policy in the target model. The variables can be used in an A-Policy's Condition of the target model</div> <div>- Every Variable:name in the source model becomes a Variable:name in the target model</div> <div>- Every Variable:type in the source model becomes a Variable:type in the target model</div>	<div><div>Variable</div><div>name : EString</div><div>valeu : EString</div></div>
<div><div>Rule</div><div>name : EString</div><div>event : EventType</div><div>condition : EString</div><div>action : EString</div></div>	<div>For a Rule in the source model, depending on the Event Type, the corresponding transformation in the target model is:</div> <div><ul style="list-style-type: none"><li>Precondition Rule if the Event Type is Pre;</li><li>Postcondition Rule if the Event Type is Post;</li><li>TimeRestriction Rule if the Event Type is Time</li></ul></div>	<div><div>Rule</div><div></div><div>Precondition</div><div>Postcondition</div><div>TimeRestriction</div></div>