CoCoME PCM Model Migration

Migration from PCM 2.x to PCM 3.x

# CoCoME PCM Model Overview (2008-06-06)



# Changes in [\*.repository]

## resourceDemand\_Action

<resourceDemand\_Action specification="1" unit="ms">

<requiredResource\_ParametricResourceDemand href="cocome.resourcetype#\_Af748dO1EduL6bgulTgjzg"/>

</resourceDemand\_Action>

<resourceDemand\_Action>

<requiredResource\_ParametricResourceDemand href="pathmap://PCM\_MODELS/Palladio.resourcetype#\_oro4gG3fEdy4YaaT-RYrLQ"/>

<specification\_ParametericResourceDemand specification="1"/>

</resourceDemand\_Action>

## specification\_ParametericResourceDemand

<resourceDemand\_Action specification="DoublePDF(unit=&quot;ms&quot;)[ (0.5; 0.5) (1.0; 0.5) ]" unit="ms">

<requiredResource\_ParametricResourceDemand href="cocome.resourcetype#\_Af748dO1EduL6bgulTgjzg"/>

</resourceDemand\_Action>

<resourceDemand\_Action>

<requiredResource\_ParametricResourceDemand href="pathmap://PCM\_MODELS/Palladio.resourcetype#\_oro4gG3fEdy4YaaT-RYrLQ"/>

<specification\_ParametericResourceDemand specification="DoublePDF[ (0.5; 0.50000000) (1.0; 0.50000000) ]"/>

</resourceDemand\_Action>

## iterations\_LoopAction

<iterations\_LoopAction specification="numberOfStores.VALUE"/>

<iterationCount\_LoopAction specification="numberOfStores.VALUE"/>

## branchCondition\_BranchTransition

<branchCondition\_BranchTransition specification="productAmounts.NUMBER\_OF\_ELEMENTS == 0"/>

<branchCondition\_GuardedBranchTransition specification="productAmounts.NUMBER\_OF\_ELEMENTS == 0"/>

## variableUsage\_SetVariableAction

<variableUsage\_SetVariableAction>

<variableCharacterisation\_VariableUsage specification=  
 "IntPMF(unit=&quot;NUMBER\_OF\_ELEMENTS&quot;)[ (1;0.1) (2;0.5) (3;0.2) (4;0.2) ]" type="NUMBER\_OF\_ELEMENTS"/>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="RETURN"/>

</variableUsage\_SetVariableAction>

<localVariableUsages\_SetVariableAction>

<variableCharacterisation\_VariableUsage type="NUMBER\_OF\_ELEMENTS">

<specification\_VariableCharacterisation specification="IntPMF[ (1;0.1) (2;0.5) (3;0.2) (4;0.2) ]"/>

</variableCharacterisation\_VariableUsage>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="RETURN"/>

</localVariableUsages\_SetVariableAction>

## parameterUsage\_ExternalCallAction

<parameterUsage\_ExternalCallAction>

<variableCharacterisation\_VariableUsage specification=  
 "saleTO.NUMBER\_OF\_ELEMENTS \* IntPMF[ (0;0.99) (1;0.01) ]" type="NUMBER\_OF\_ELEMENTS"/>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="productAmounts"/>

</parameterUsage\_ExternalCallAction>

<inputParameterUsages\_ExternalCallAction>

<variableCharacterisation\_VariableUsage type="NUMBER\_OF\_ELEMENTS">

<specification\_VariableCharacterisation specification="saleTO.NUMBER\_OF\_ELEMENTS \* IntPMF[ (0;0.99) (1;0.01) ]"/>

</variableCharacterisation\_VariableUsage>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="productAmounts"/>

</inputParameterUsages\_ExternalCallAction>

## outputVariableUsage\_ExternalCallAction

<outputVariableUsage\_ExternalCallAction>

<variableCharacterisation\_VariableUsage specification="RETURN.NUMBER\_OF\_ELEMENTS" type="NUMBER\_OF\_ELEMENTS"/>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="productList"/>

</outputVariableUsage\_ExternalCallAction>

<outputVariableUsages\_ExternalCallAction>

<variableCharacterisation\_VariableUsage type="NUMBER\_OF\_ELEMENTS">

<specification\_VariableCharacterisation specification="RETURN.NUMBER\_OF\_ELEMENTS"/>

</variableCharacterisation\_VariableUsage>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="productList"/>

</outputVariableUsages\_ExternalCallAction>

## componentParameterUsage\_AssemblyContext

<componentParameterUsage\_AssemblyContext>

<variableCharacterisation\_VariableUsage specification="200" type="VALUE"/>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="numberOfStores"/>

</componentParameterUsage\_AssemblyContext>

<configParameterUsages\_AssemblyContext>

<variableCharacterisation\_VariableUsage type="VALUE">

<specification\_VariableCharacterisation specification="200"/>

</variableCharacterisation\_VariableUsage>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="numberOfStores"/>

</configParameterUsages\_AssemblyContext>

# Changes in [\*.resourceenvironment]

## communicationLinkResourceSpecifications\_LinkingResource

<communicationLinkResourceSpecifications\_LinkingResource throughput="1000000.0" units="Byte">

<communicationLinkResourceType\_CommunicationLinkResourceSpecification href="cocome.resourcetype#\_GnPOYtO1EduL6bgulTgjzg"/>

<linkLatency specification="0"/>

</communicationLinkResourceSpecifications\_LinkingResource>

<communicationLinkResourceSpecifications\_LinkingResource>

<communicationLinkResourceType\_CommunicationLinkResourceSpecification  
 href="pathmap://PCM\_MODELS/Palladio.resourcetype#\_o3sScH2AEdyH8uerKnHYug"/>

<latency\_CommunicationLinkResourceSpecification specification="0.0"/>

<throughput\_CommunicationLinkResourceSpecification specification="1000000.0"/>

</communicationLinkResourceSpecifications\_LinkingResource>

## activeResourceSpecifications\_ResourceContainer

<activeResourceSpecifications\_ResourceContainer schedulingPolicy="PROCESSOR\_SHARING" processingRate="1.0" units="CPU">

<activeResourceType\_ActiveResourceSpecification href="cocome.resourcetype#\_Af748dO1EduL6bgulTgjzg"/>

</activeResourceSpecifications\_ResourceContainer>

<activeResourceSpecifications\_ResourceContainer schedulingPolicy="PROCESSOR\_SHARING">

<activeResourceType\_ActiveResourceSpecification href="pathmap://PCM\_MODELS/Palladio.resourcetype#\_oro4gG3fEdy4YaaT-RYrLQ"/>

<processingRate\_ProcessingResourceSpecification specification="1.0"/>

</activeResourceSpecifications\_ResourceContainer>

# Changes in [\*.usagemodel]

## actualParameterUsage\_EntryLevelSystemCall

<actualParameterUsage\_EntryLevelSystemCall>

<variableCharacterisation\_VariableUsage specification=  
 "IntPMF[ (1;0.3) (8;0.1) (15;0.15) (25;0.15) (50;0.2) (75;0.1) ]" type="NUMBER\_OF\_ELEMENTS"/>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="saleTO"/>

</actualParameterUsage\_EntryLevelSystemCall>

<inputParameterUsages\_EntryLevelSystemCall>

<variableCharacterisation\_VariableUsage type="NUMBER\_OF\_ELEMENTS">

<specification\_VariableCharacterisation specification="IntPMF[ (1;0.3) (8;0.1) (15;0.15) (25;0.15) (50;0.2) (75;0.1) ]"/>

</variableCharacterisation\_VariableUsage>

<namedReference\_VariableUsage xsi:type="stoex:VariableReference" referenceName="saleTO"/>

</inputParameterUsages\_EntryLevelSystemCall>

# Other Changes

## List of Changes

* explicit definition of resources types (CPU etc.) in [\*.resourceType] is not necessary any more