

# Communication diagram elements

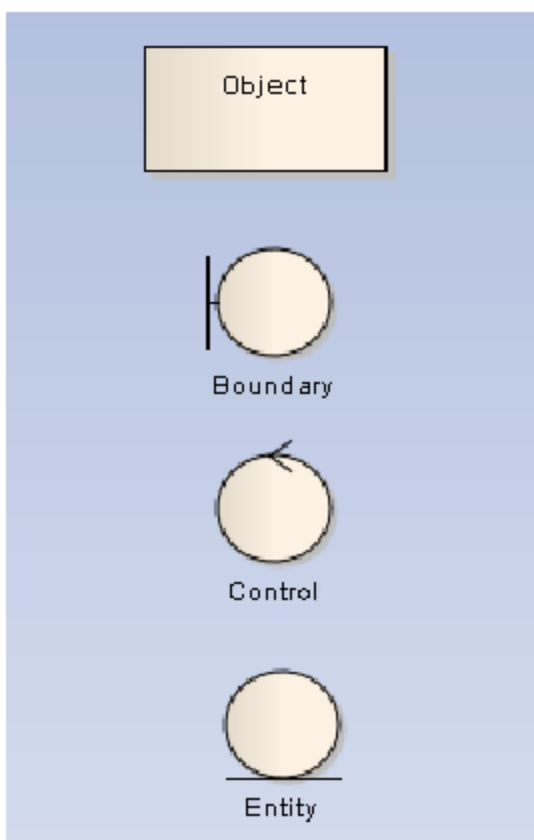
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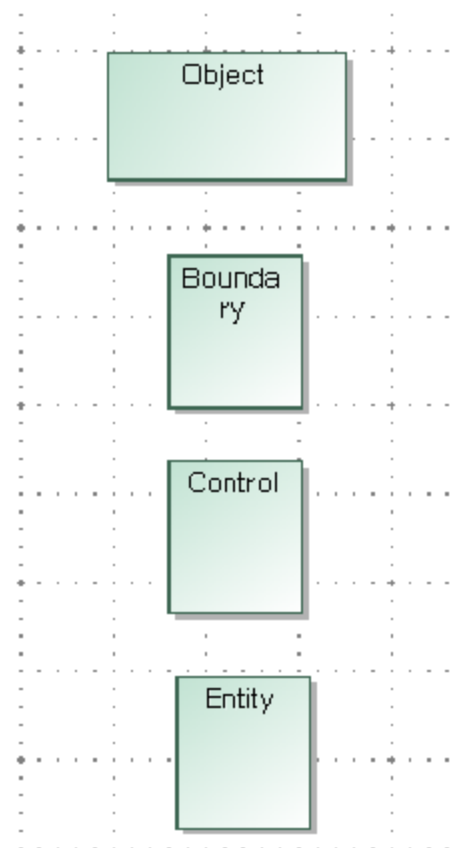
## Object, Boundary, Entity, and Control

All Object, Boundary, Entity, Control elements in EA are InstanceSpecifications. After conversion, their UML element types will remain, and a Lifeline and an OwnedAttribute element will be created to represent each of them in the Communication diagram in which they occur.

### EA (Before Conversion)

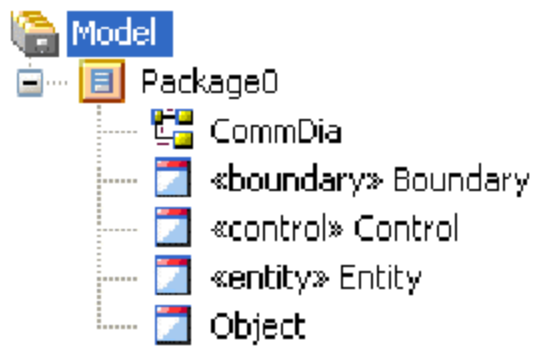


### MD (After Conversion)

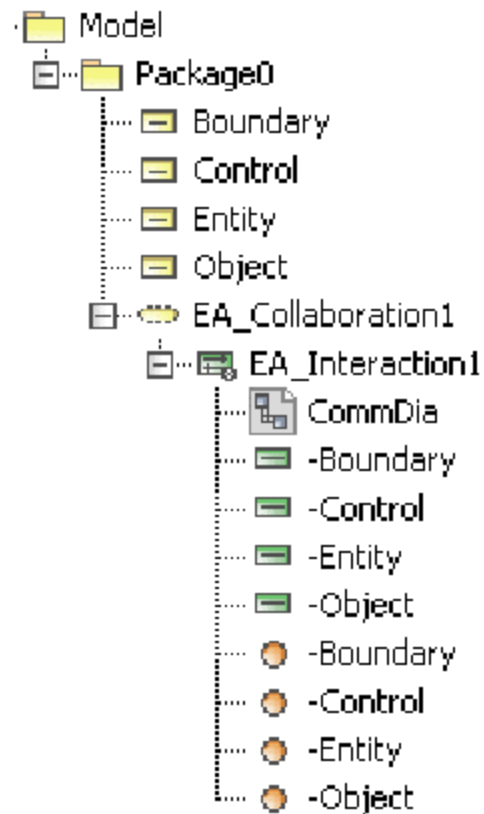


Object, Boundary, Entity, and Control (diagram view).

## EA Containment Tree



## MD Containment Tree

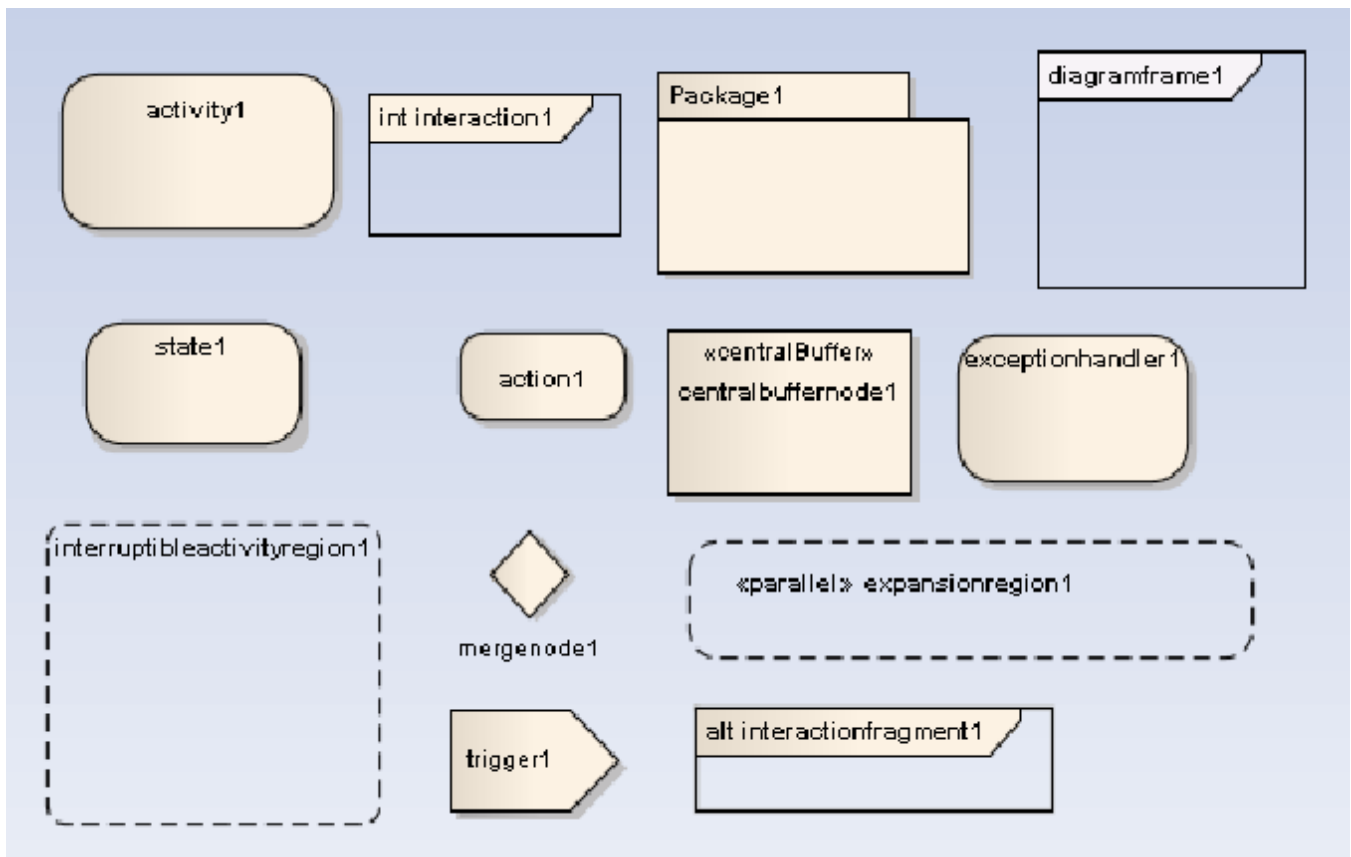


Object, Boundary, Entity, and Control (Containment tree).

Other elements that can be drawn in a Communication diagram will be handled in a similar manner.

## Exception elements

Some of the elements that can be drawn in a Communication diagram using EA are not supported by MagicDraw. Consequently, their displaying parts will not be imported. These elements include Package, Activity, Action, DiagramFrame, State, Interaction, ExceptionHandler, CentralBufferNode, InterruptibleActivityRegion, MergeNode, Trigger, ExpansionRegion, and InteractionFragment.

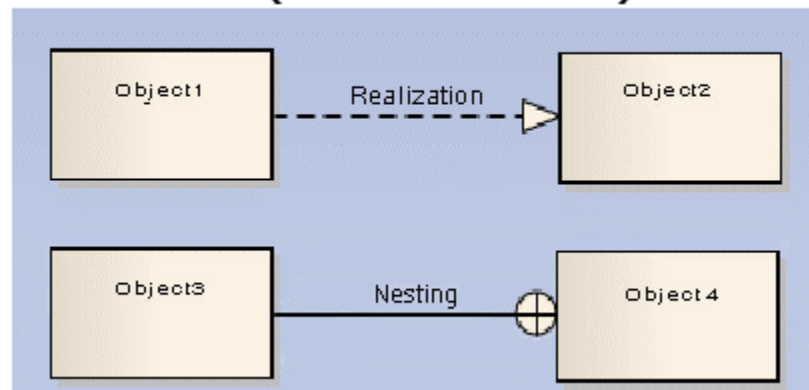


Exception elements.

## Realization and Nesting

The Realization element type in EA is 'uml:Realization'. The Nesting element type in EA is exported in XML as *uml:Dependency*. The Realization and Nesting lines in EA are not supported in the Communication diagram; therefore, only their model data will be imported, not the displaying parts.

## EA (Before Conversion)

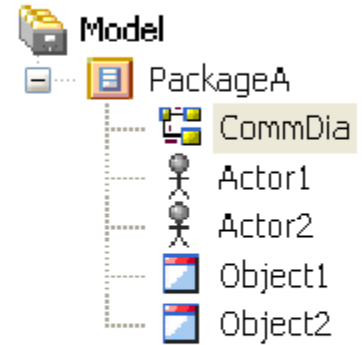
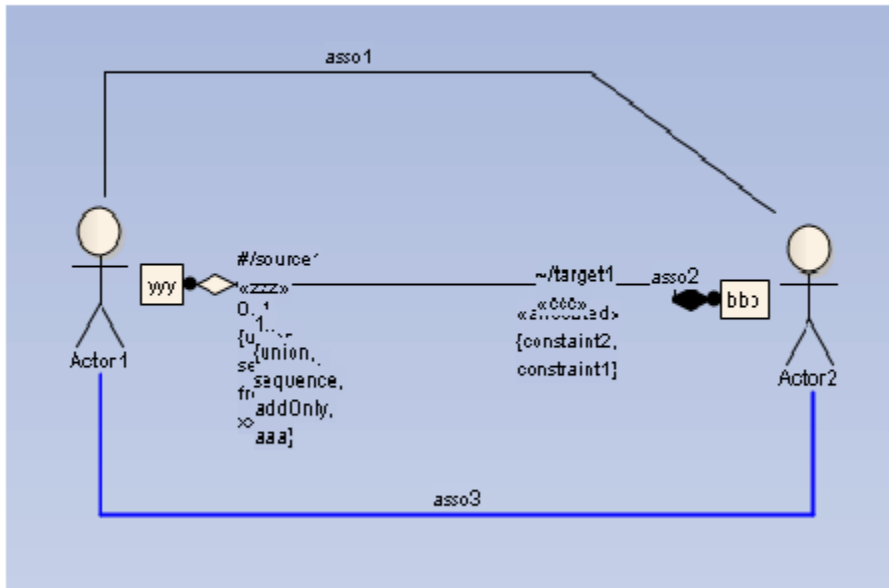


Realization and Nesting.

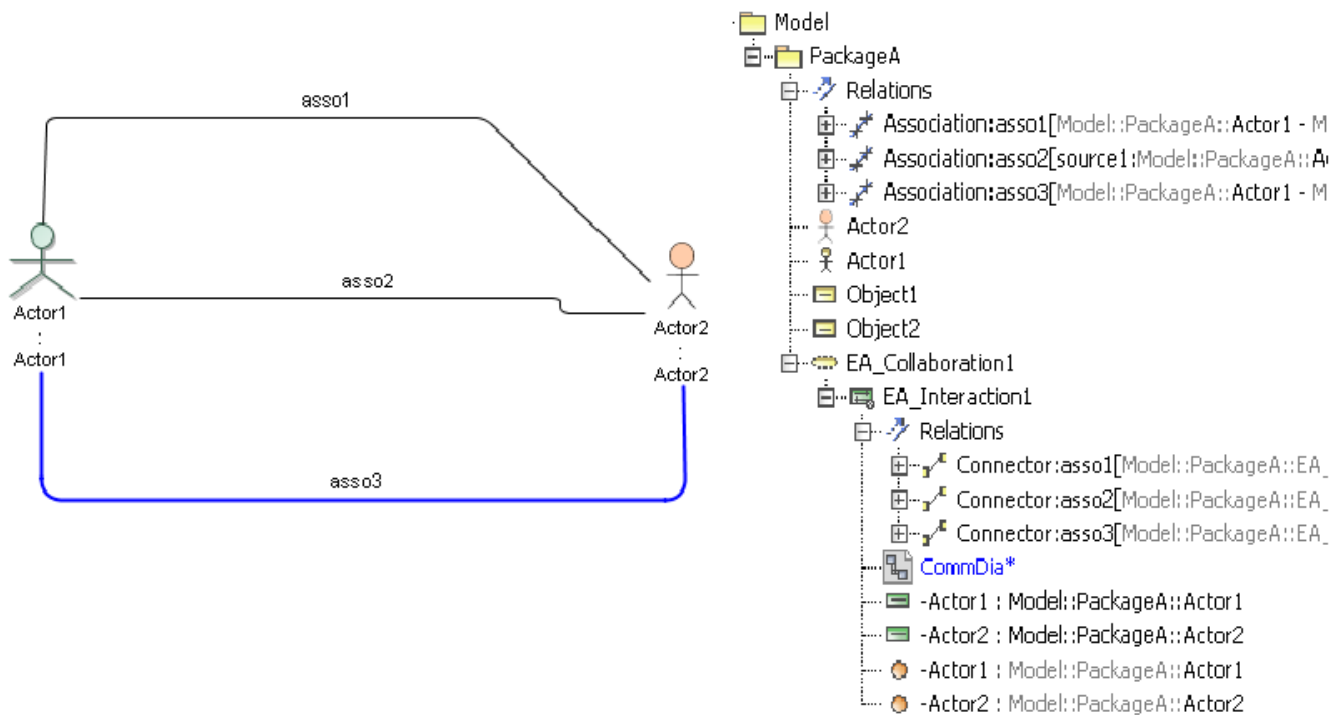
## Association

Every Association relationship drawn in a Communication diagram in EA will have a Connector line created for each of them. The elements attached to both ends of the Association line will have a Lifeline element created to represent each of them. The Association lines and the elements attached to them will not be removed. However, the elements that will be shown in the MagicDraw diagram frame will be the Lifeline elements and the Connector lines created to represent them.

## EA (Before Conversion)



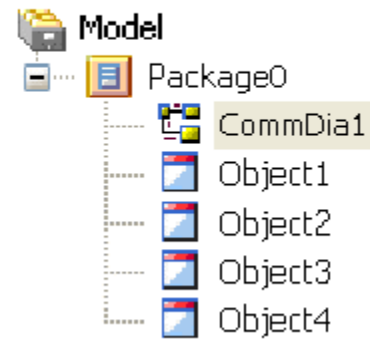
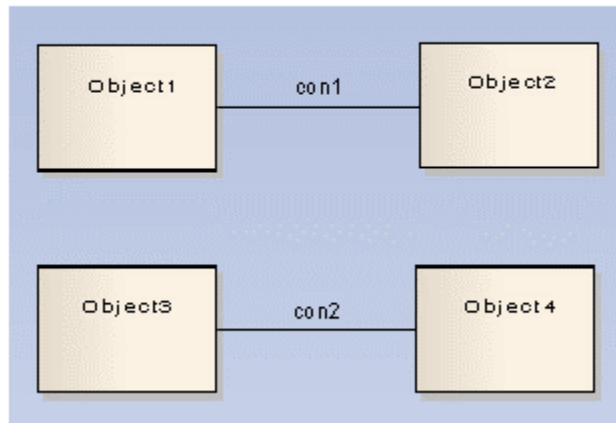
## MD (After Conversion)



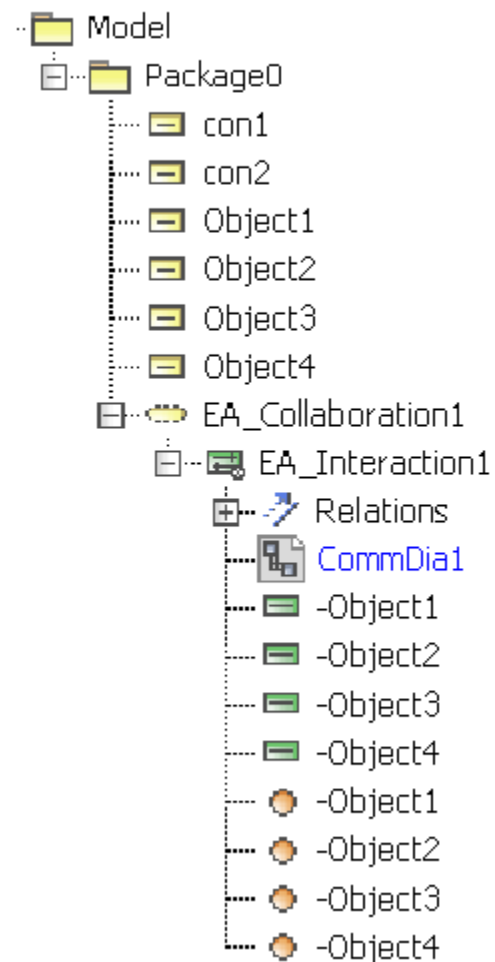
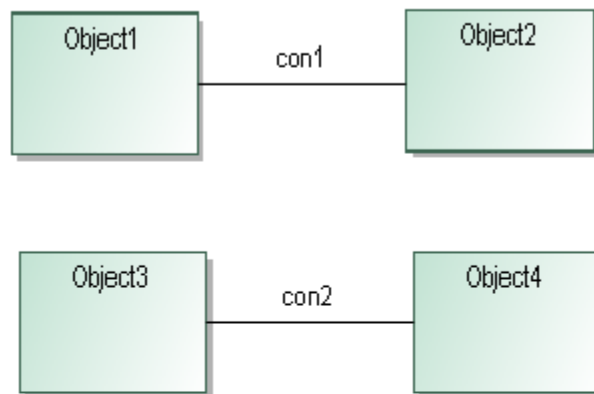
Association.

If an Association line is connected to the InstanceSpecification elements, its data will be removed. If an Association line is linked between two InstanceSpecification elements, it will be transformed into an InstanceSpecification element. This is one of the constraints belonging to the Communication diagram.

## EA (Before Conversion)



## MD (After Conversion)

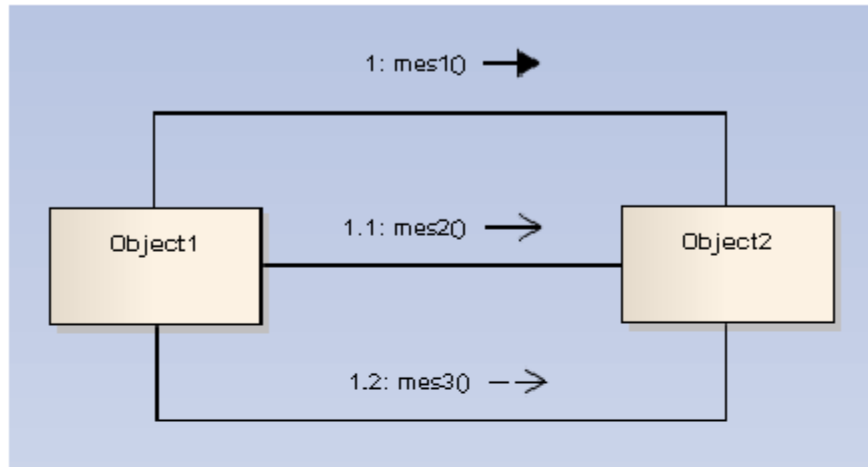


Association Line between InstanceSpecifications.

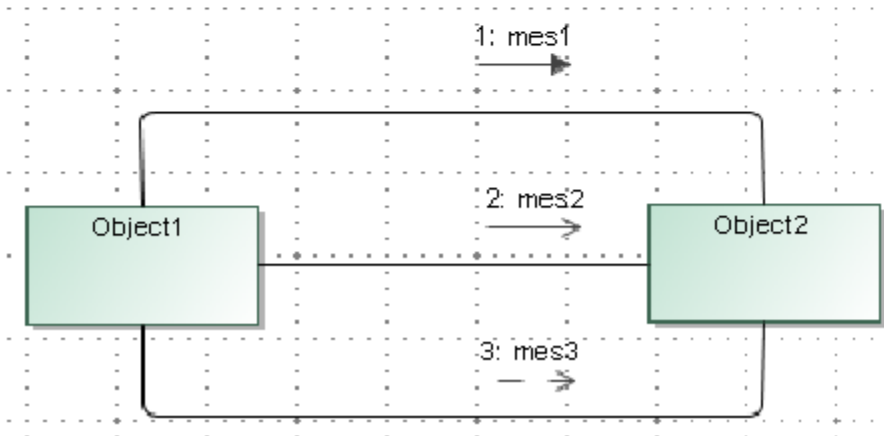
## Message

Messages can be created on Connectors and will be imported to MagicDraw.

## EA (Before Conversion)



## MD (After Conversion)

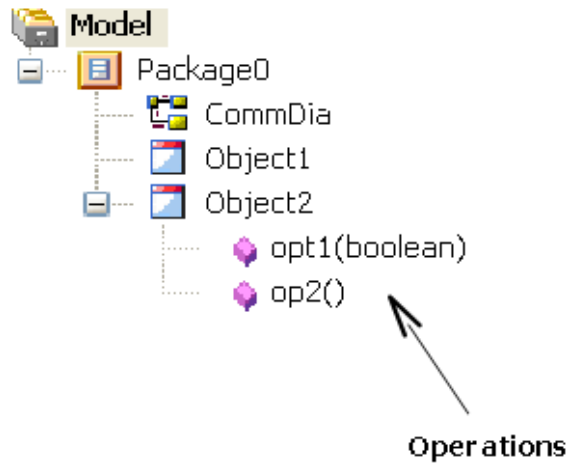


Message.

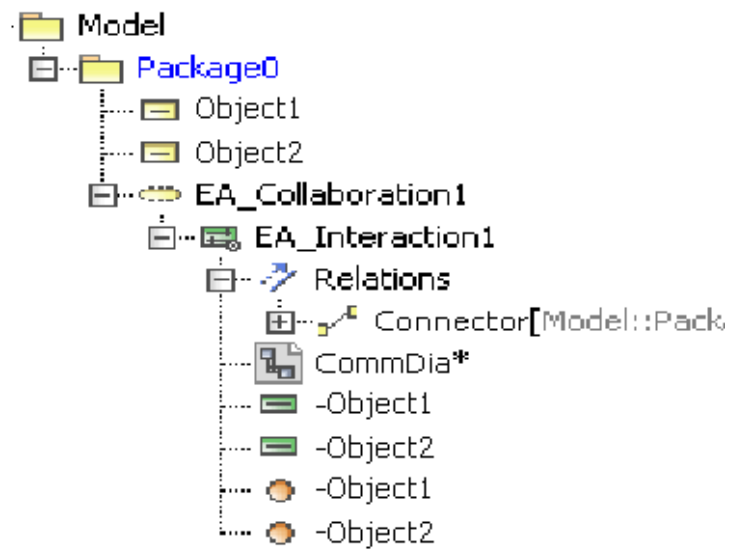
## Operations

An InstanceSpecification cannot contain Operation elements. If the XMI file from EA has some InstanceSpecification elements containing Operation elements, those Operations will be removed.

## EA (Before Conversion)



## MD (After Conversion)



Operations.