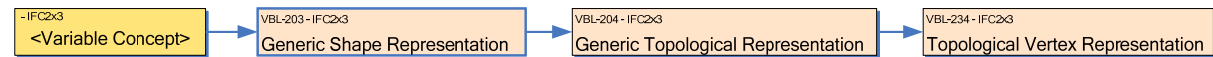


IFC Release Specific Concept Description (IFC2x3)

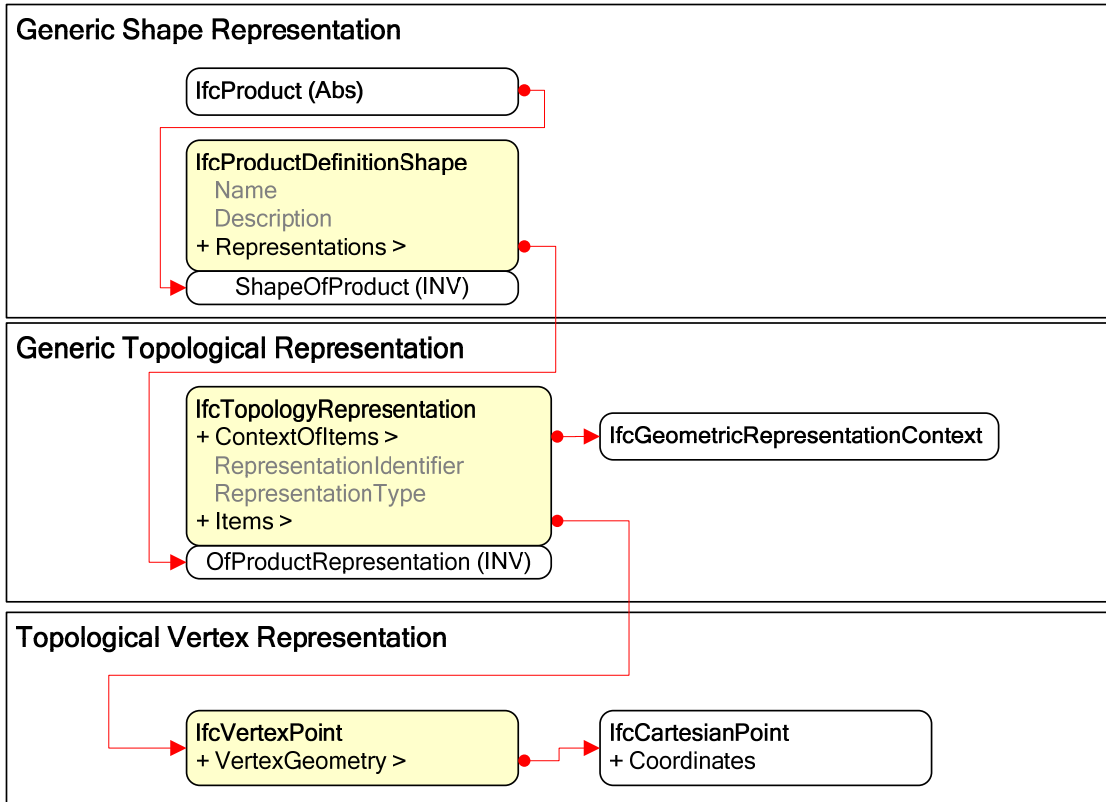
Topological Vertex Representation

Reference	VBL-234	Version	2	Status	Proposal
Relationships	Implements general concept 'Vertex Representation'.				
History	Created 23.10.2006, improved 28.9.2007				
Authors	Sakari Lehtinen				
Document Owner	Virtual Building Laboratory @ TUT (sakari.lehtinen@tut.fi)				

Usage in view definition diagram



Instantiation diagram



Implementation agreements

IfcProductDefinitionShape

Attribute	Implementation agreements
Name	Reserved.
Description	Reserved.
Representations	Must be one IfcTopologyRepresentation.

IfcTopologyRepresentation

Attribute	Implementation agreements
ContextOfItems	N/A
RepresentationIdentifier	Not used.
RepresentationType	Must be 'Vertex'
Items	Must be one IfcVertexPoint

IfcCartesianPoint

Attribute	Implementation agreements
Coordinates	Must be three dimensions.

Dim N/A

Additional information

P21 example

```
#1477=IFCSTRUCTURALPOINTCONNECTION('2$8aT4gQrDOL6wIzENGRST',#2,'Example connection',$,$,#1740,#1741,$);
```

```
#1727=IFCCARTESIANPOINT((7100.0,-1115.0,0.0));  
#1738=IFCVERTEXPOINT(#1727);  
#1931=IFCTOPOLOGYREPRESENTATION(#77,$,'Vertex',(#1738));  
#1741=IFCPRODUCTDEFINITIONSHAPE($,$,(#1931));
```

```
#43=IFCDIRECTION((0.0,0.0,1.0));  
#1725=IFCDIRECTION((0.0,-1.0,0.0));  
#1724=IFCAXIS2PLACEMENT3D($,#43,#1725);  
#1740=IFCLOCALPLACEMENT($,#1724);
```

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The content of this document has to be certified by the IAI before becoming part of an official IFC Model View Definition.