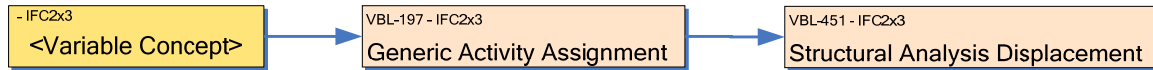


IFC Release Specific Concept Description (IFC2x3)

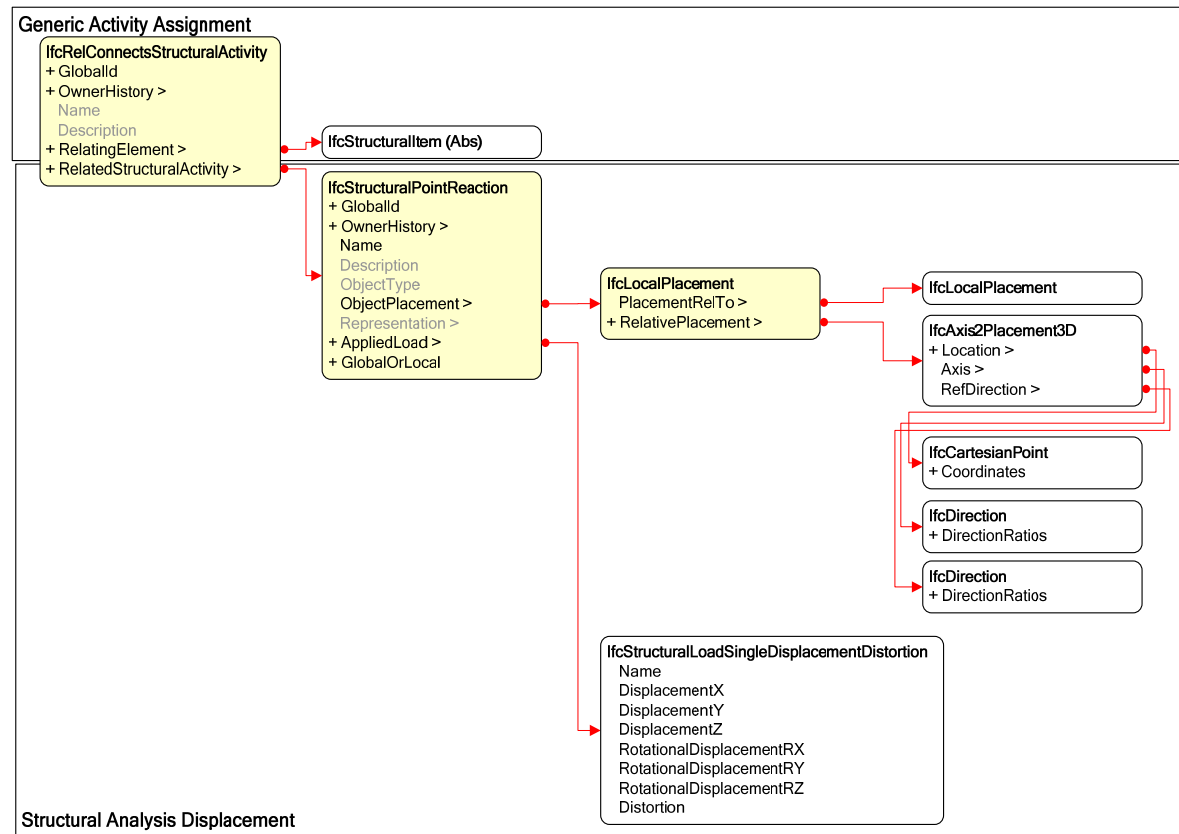
Structural Analysis Displacement

Reference	VBL-451	Version	1	Status	Proposal
Relationships					
History	Created 31.1.2008				
Authors	Sakari Lehtinen				
Document Owner	Virtual Building Laboratory @ TUT (sakari.lehtinen@tut.fi)				

Usage in view definition diagram



Instantiation diagram



Implementation agreements

IfcRelConnectsStructuralActivity

Attribute	Implementation agreements
GlobalId	Providing a GUID is mandatory, but the GUID is allowed to change.
OwnerHistory	Providing an OwnerHistory is mandatory, but it is allowed to use dummy data.
Name	<i>Reserved.</i>
Description	<i>Reserved.</i>
RelatingElement	<i>Must be some of the IfcStructuralItem's subtypes.</i>
RelatedStructuralActivity	<i>Must be IfcStructuralPointReaction.</i>

IfcStructuralPointReaction

Attribute	Implementation agreements
GlobalId	<Open>
OwnerHistory	<Open>
Name	'MIN' if minimum values are presented. 'MAX' if maximum values are presented. 'END' if values for end or start points of the member are presented. 'INT' if values for intermediate points of the member are presented. Note that for MIN and MAX the different forces and moments are usually in the different points, so different instances of IfcReaction for them has to be created.
Description	<Open>
ObjectType	<Open>
ObjectPlacement	Must be IfcLocalPlacement. The point for the internal forces is presented in the local coordinate system of the StructuralItem. The point must be on the axis of the relative curve member or within the surface of the relative surface member.
Representation	<Open>
AppliedLoad	Must be IfcStructuralLoadSingleDisplacementDistortion. Note that not all the values must be presented for all the instances.
GlobalOrLocal	<Open>

IfcLocalPlacement

Attribute	Implementation agreements
PlacementRelTo	References to the IfcLocalPlacement of the relative Structural Item.
RelativePlacement	The point where the displacement takes place is given in the local coordinate system of the relative structural item.

This document uses the official IFC Model View Definition Format version 1.1.0. of the IAI (www.iai-international.org)
The content of this document has to be certified by the IAI before becoming part of an official IFC Model View Definition.