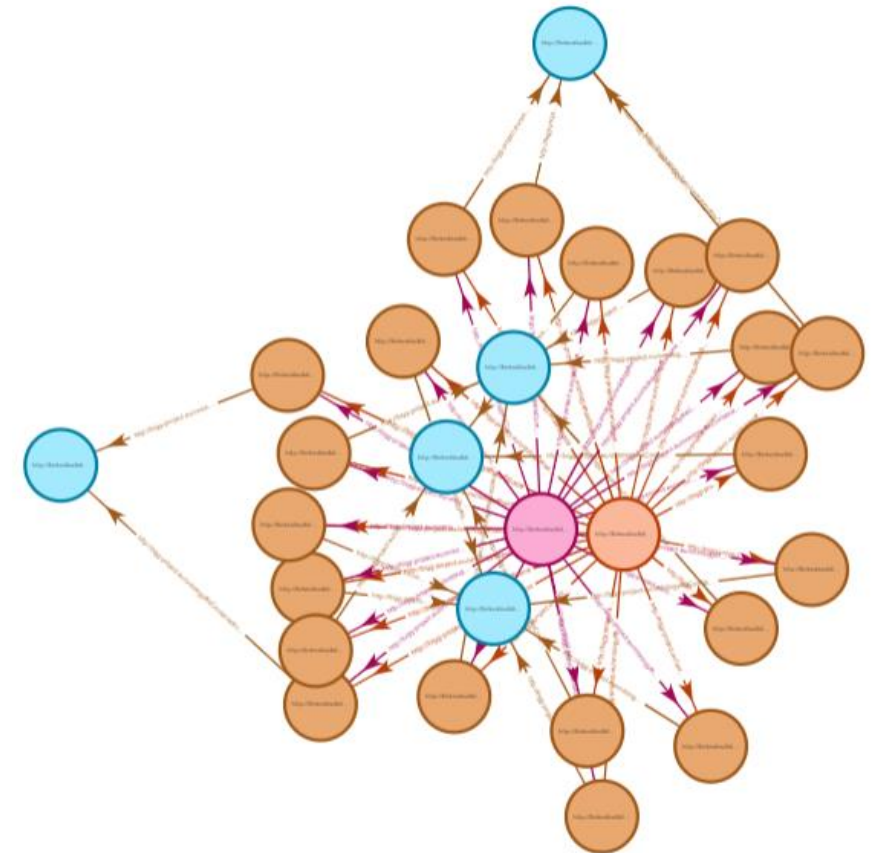
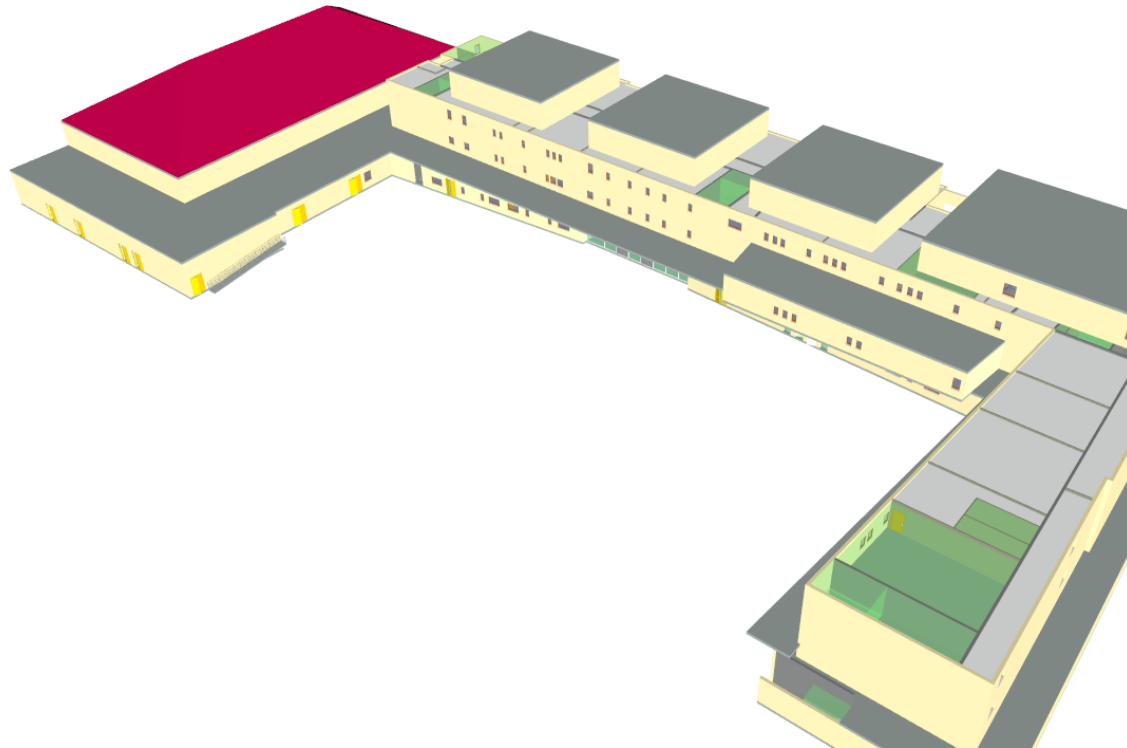
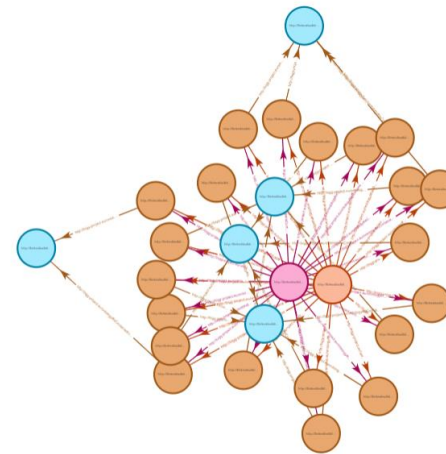
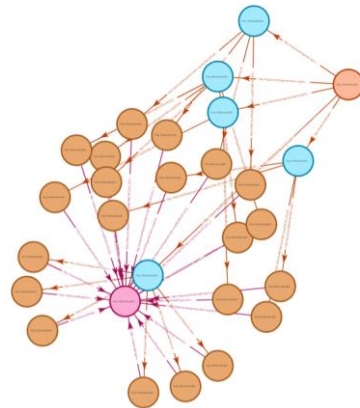
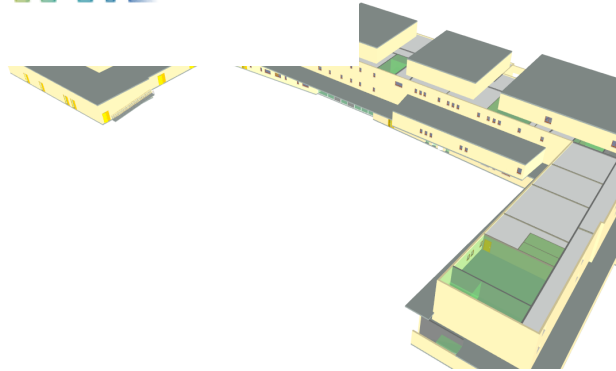


Harmonizing IFC building models with BiGG Ontology



BIGG



BIGG

```
i:IfcBuilding_135    a bigg:Building ;
                    bigg:hasSpace i:IfcSpace_286 .
i:IfcBuildingStorey_176 a bigg:Zone .
```

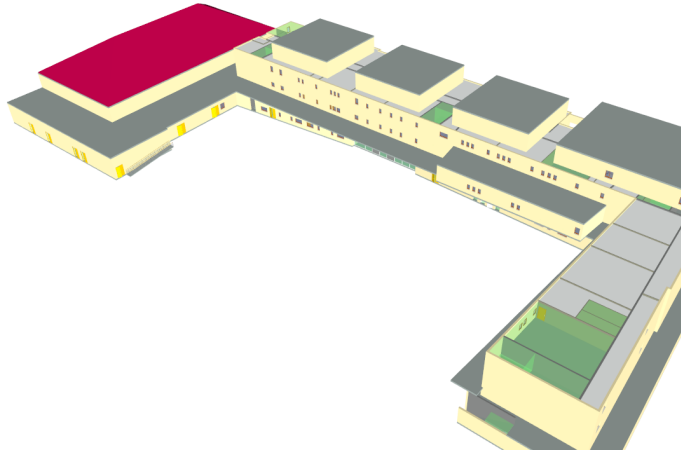
IFCOWL

```
i:IfcBuilding_135 a :IfcBuilding ;
                :IfcRelDecomposes i:IfcBuildingStorey_176 .
i:IfcBuildingStorey_176 :IfcRelDecomposes i:IfcSpace_286 .
```

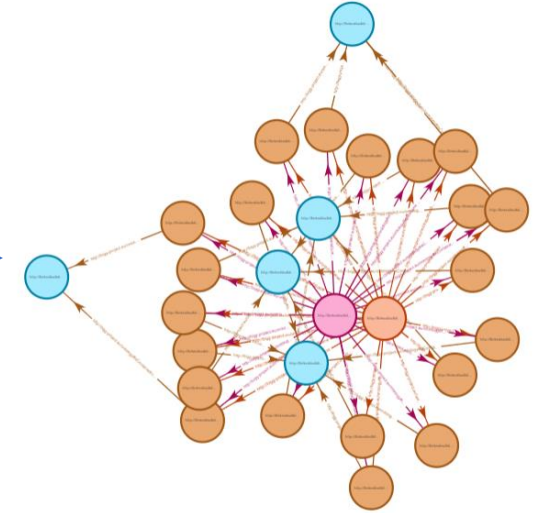
IFC

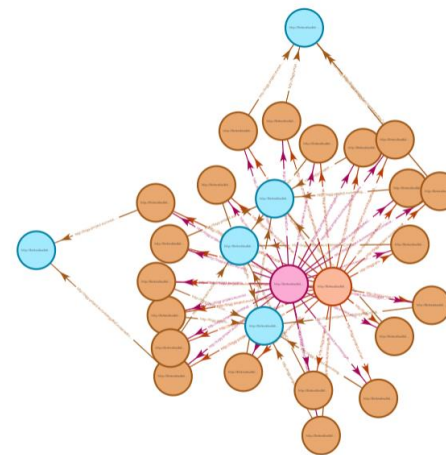
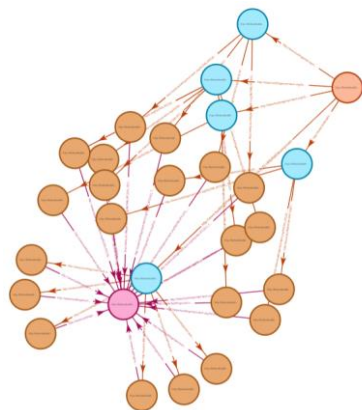
```
i#129= IFCBUILDING('3XQtU7NtD0_AttF8dEJZU8',#41,"$,,$,#32,$,",".ELEMENT.,$,,$,#125);
#657951= IFCRELAGGREGATES('2Ps44h3395Peo5Jg2i7kZB',#41,$,$,#129,(#138,#144,#150,#156,#162));
#138= IFCBUILDINGSTOREY('3XQtU7NtD0_AttF8aniSeP',#41,'RDC',$,'Niveau:Ligne du Niveau',#136,$,'RDC',.ELEMENT.,-1.94916083273711E-14);
```

Harmonizing IFC building models with BiGG Ontology



IFCOWL	BIGG
IfcDistributionElement	bigg:Device
IfcSensor	bigg:Sensor
IfcActuator	
	bigg:Measurment
	cdt:Unit
IfcProduct	bigg:Element
IfcBuilding	bigg:Building
IfcSystem	bigg:System
IfcGroup	bigg:Group
IfcSpace	bigg:BuildingSpace
IfcWall, IfcSlab	bigg:BuildingElement
IfcZone	bigg:Zone
IfcBuildingSystemElement	
IfcStorey	bigg:has:
IfcRelAggregates	bigg:containsSpace
IfcRelContainedInSpatialStructure	bigg:containedInSpace

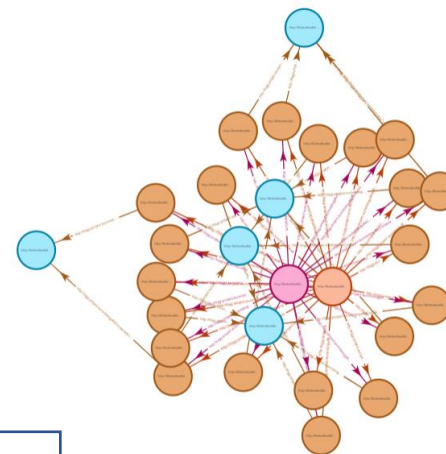
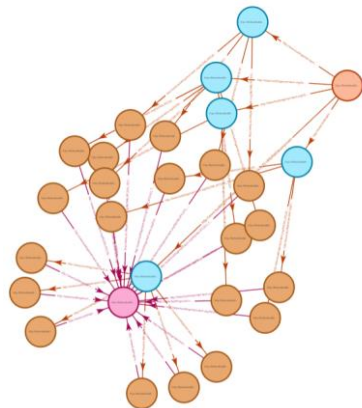




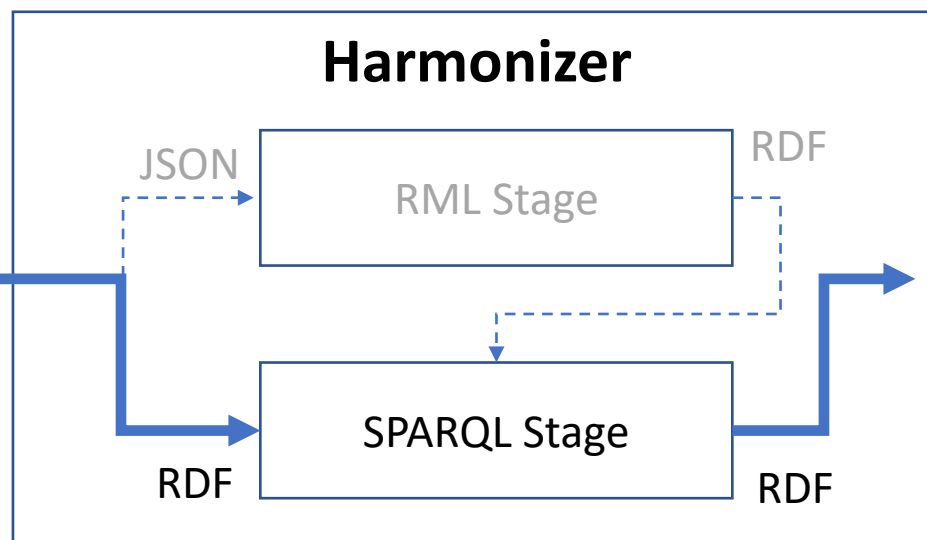
IFCOWL

Harmonizer

BIGG

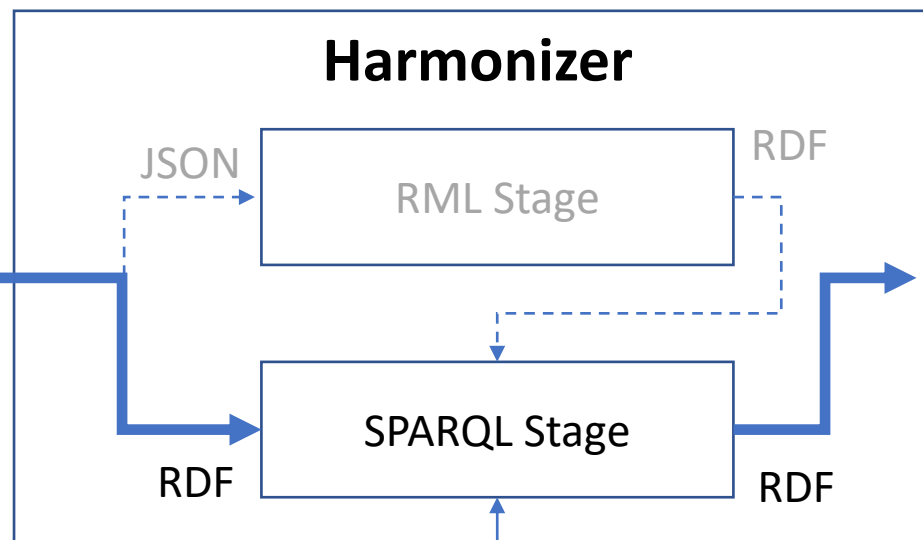


IFCOWL



BIGG

IFCOWL

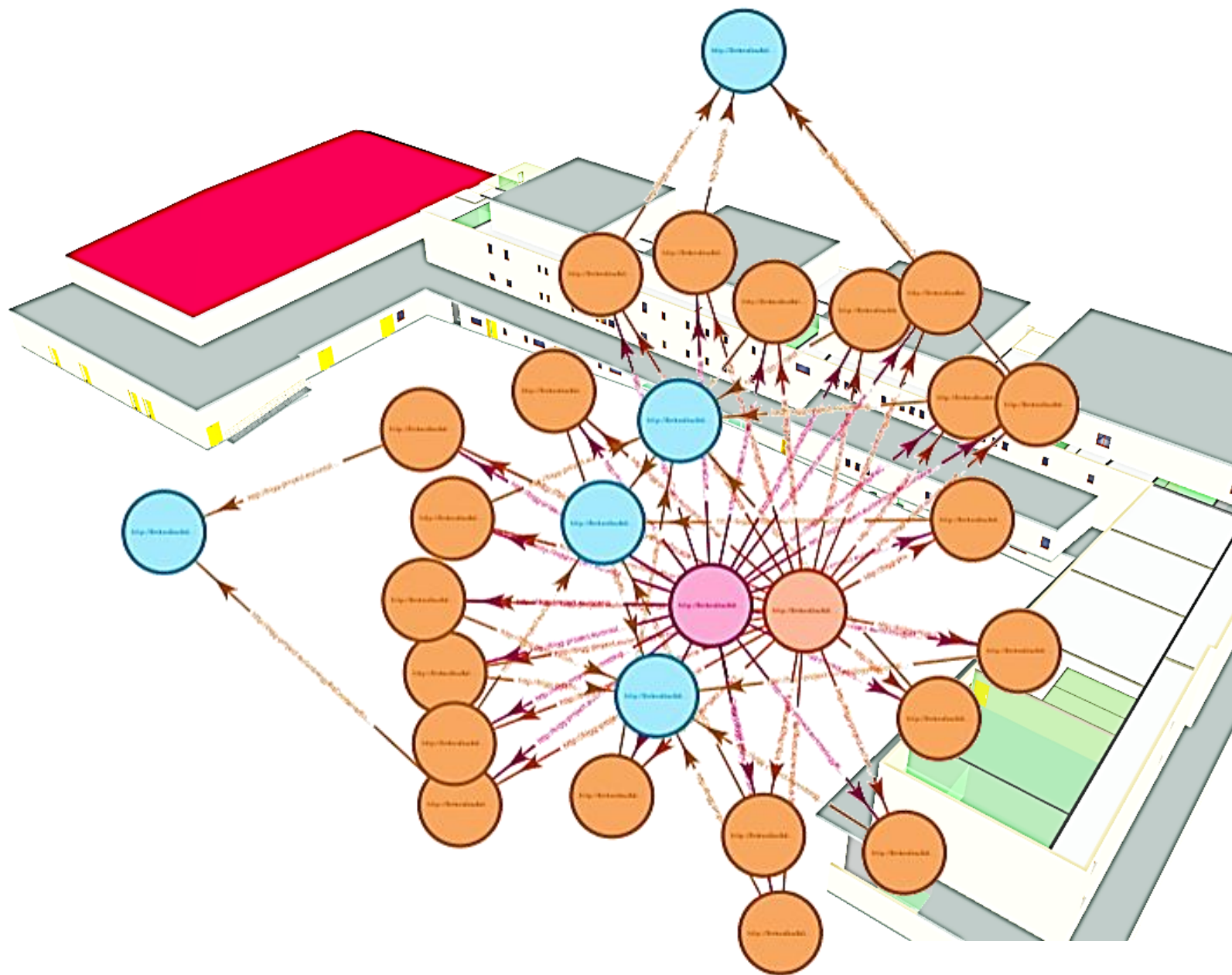


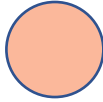

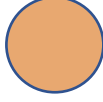
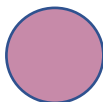
BIGG

IFC-TO-BIGG.sparql

```
PREFIX : <http://www.buildingsmart-tech.org/ifcOWL/IFC2X3_TC1#>
PREFIX bigg: <https://bigg-project.eu/ontology#>

CONSTRUCT {
    ?building a bigg:Building ; bigg:hasSpace ?space .
    ?space a bigg:BuildingSpace ; bigg:isContainedInZone ?storey .
    ...
} WHERE {
    ?building a :IfcBuilding .
    ?storey a :IfcBuildingStorey .
    ...
}
```



-  Building
-  Zones
-  Spaces
-  Boiler

