

## Flow of Events for Use Case – Check Existing Buildings

Change Log	
17/10/2004	Renamed from UC-CheckExistingBuildings
01/11/2004	Finalized for pre-integrated model

### Overview

Provides for additional information on existing buildings where this cannot be directly derived (or in addition to that which can be directly derived).

Additional information provided through this use case is particularly relevant for capturing information in the third dimension within an otherwise 2D representation.

Capabilities expressed by this use case relate to existing 2D map representations but are captured in this model based approach for completeness.

### Process

#### Preconditions

Physical constructions (buildings) must be defined on the map.

#### Actors

Applicant

#### Main Flow

Flow	Entity
1. Presently, this use case provides only for the specification of the number of storeys within a building.	IfcBuilding IfcBuildingStorey
2. Note that for a given building which may have multiple parts, each part having a different number of storeys, only the greatest number of storeys will be captured for the building as a whole.	
3. Within a model based environment, the number of storeys in a building can be determined by a query on the number of instances of IfcBuildingStorey present.	IfcBuildingStorey
4. Otherwise, the number of building storeys must be defined specifically.	
5. Further information may be determined as appropriate.	
6. Information can be captured within the extended Pset_BuildingCommon.	Pset_BuildingCommon
7. Information captured in the property set may be used for annotation through facilities in the IfcPresentationXXX resources.	

#### Post Conditions

Existing building information is captured and may be annotated as appropriate.

## ***IFC Usage and Extension Requirements***

### **Existing Entity/Class Usage**

<b><i>Entity Class Name</i></b>	<b><i>Usage</i></b>
IfcBuilding	The building for which the number of storeys is to be defined.
IfcBuildingStorey	Reference to the number of instances of IfcBuildingStorey gives the number of storeys in a building

### **Existing Property Set with Proposed Modification**

<b><i>Property Set Name</i></b>	<b><i>Usage</i></b>
Pset_BuildingCommon	Common properties specified for a building with additional data for number of building storeys.

<b><i>A R M</i></b>	<b><i>Property</i></b>	<b><i>Type</i></b>	<b><i>Datatype</i></b>	<b><i>Unit</i></b>	<b><i>Definition</i></b>
A	NumberOfStoreys	IfcPropertySingleValue	IfcInteger		The number of storeys within a building

### ***Issue List***

<b><i>Question</i></b>	<b><i>Answer</i></b>