Compositors

Complex type maps to UML Class with the stereotype XSDcomplexType. In order to have a group in a complex type, the same UML Class must also have the XSDall, XSDchoice or XSDsequence stereotype.

A UML model can have a ModelClass with only a single stereotype XSDall, XSDchoice, or XSDsequence. In this case, the class maps to the inner part of another group.

Element order in a sequence group is very important. These elements are ordered according to the values of TaggedValue sequenceOrder.

compositors XML representation summary

```
<all

        id = ID

        maxOccurs = 1 : 1

        minOccurs = (0 | 1) : 1

        {any attributes with non-schema namespace...}>
        Content: (annotation?, element*)
</all>

<choice

        id = ID

        maxOccurs = (nonNegativeInteger | unbounded):1

        minOccurs = nonNegativeInteger : 1
        {any attributes with non-schema namespace…}>

        Content: (annotation?, (element | group | choice | sequence | any)*)

</choice>

<sequence

        id = ID

        maxOccurs = (nonNegativeInteger | unbounded) : 1

        minOccurs = nonNegativeInteger : 1

        {any attributes with non-schema namespace…}>

        Content: (annotation?, (element | group | choice | sequence | any)*)
</sequence>
```

XML representations for the three kinds of model group

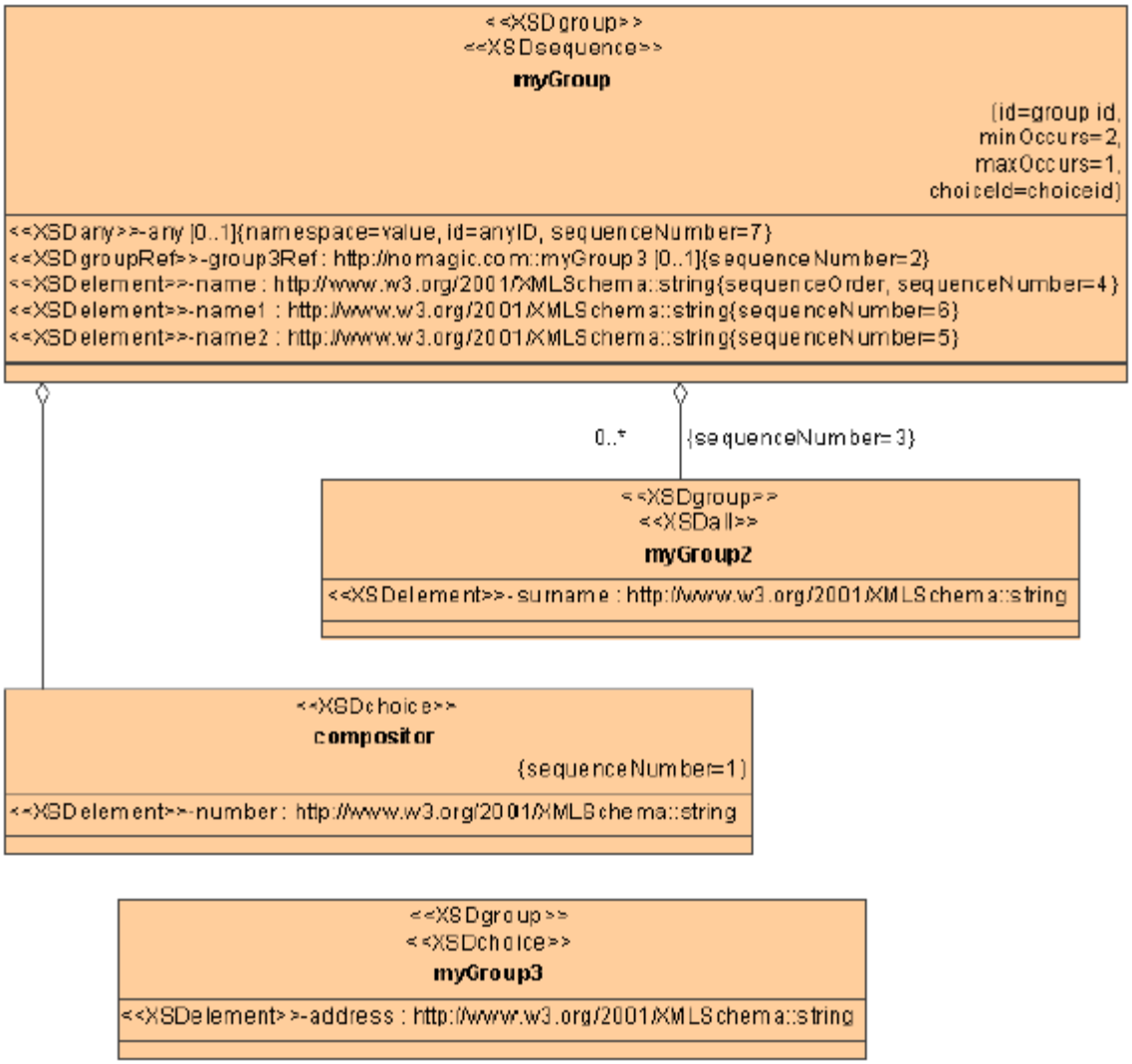
```
<xs:all>

        <xs:element ref="cats"/>
        <xs:element ref="dogs"/>
</xs:all>


<xs:sequence>
        <xs:choice>

                <xs:element ref="left"/>
                <xs:element ref="right"/>
        </xs:choice>

        <xs:element ref="landmark"/>
</xs:sequence>
```



compositors UML model example.

compositors XML code sample

```
<?xml version ='1.0' encoding = 'Cp1252'?>


<xs:schema xmlns:nm = "http://nomagic.com" xmlns:xs = "http://www.w3.org/2001/XMLSchema" targetNamespace = "http
://nomagic.com">

        <xs:group name = "myGroup" >

                <xs:annotation>

                        <xs:documentation>my group documentation</xs:documentation>

                </xs:annotation>

                <xs:sequence minOccurs = "2" maxOccurs = "1">

                        <xs:choice>

                                <xs:element name = "number" type = "xs:string" />
                        </xs:choice>

                        <xs:group ref = "nm:myGroup3" minOccurs = "0" maxOccurs = "1" >

                                <xs:annotation >

                                        <xs:documentation>ref documentation</xs:documentation>

                                </xs:annotation>
                        </xs:group>

                        <xs:group ref = "nm:myGroup2" minOccurs = "0" maxOccurs = "unbounded" >

                                <xs:annotation >

                                        <xs:documentation >another ref documentation</xs:documentation>

                                ‹/xs:annotation>
                        </xs:group>

                        <xs:element name = "name" type = "xs:string" />
                        <xs:element name = "name2" type = "xs:string" />
                        <xs:element name = "name1" type = "xs:string" />

                        <xs:any id = "anyID" namespace = "value" minOccurs = "0" maxOccurs = "1" />

                </xs:sequence>

        </xs:group>

        <xs:group name = "myGroup3" >

                <xs:choice >

                        <xs:element name = "address" type = "xs:string" />
                </xs:choice>

        </xs:group>

        <xs:group name = "myGroup2" >

                <xs:all>

                        <xs:element name = "surname" type = "xs:string" />
                </xs:all>

        </xs:group>
</xs:schema>
```