

# 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>

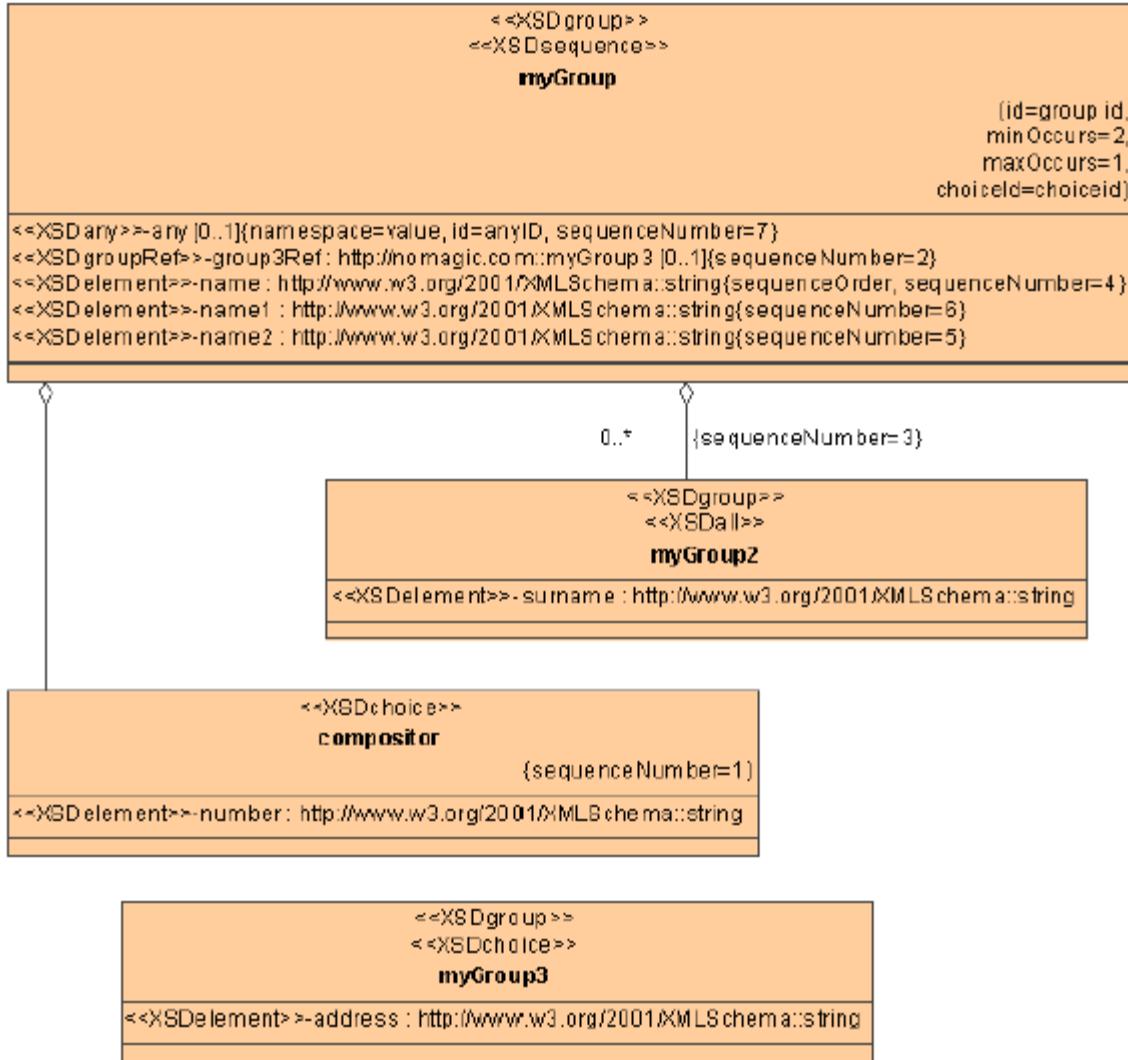
<choice
    id = ID
    maxOccurs = (nonNegativeInteger | unbounded):1
    minOccurs = nonNegativeInteger : 1
    {any attributes with non-schema namespace...}>
    Content: (annotation?, (element | group | choice | sequence | any)*)
</choice>

<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

```
<xsd:all>
    <xsd:element ref="cats"/>
    <xsd:element ref="dogs"/>
</xsd:all>

<xsd:sequence>
    <xsd:choice>
        <xsd:element ref="left"/>
        <xsd:element ref="right"/>
    </xsd:choice>
    <xsd:element ref="landmark"/>
</xsd: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>
```