

# Redefine

Maps to a UML Class with the stereotype `XSDredefine`. This class has inner UML Classes as redefined elements. Every redefined element must be derived from other UML classes with stereotypes `XSDsimpleType`, `XSDcomplexType`, `XSDgroup`, or `XSDattributeGroup`. The name of this class shall match the "schemaLocation" value.

If two "redefine" with the same schema location appears, they shall be merged into the same class with the name "schemaLocation".

The Redefine Class must be the inner class of the `XSDschema` Class.

- annotation - to the `XSDredefine` UML Class documentation
- schemaLocation – to the `XSDredefine` UML Class name.

## redefine XML representation summary

```
<redefine
  id = ID
  schemaLocation = anyURI
  {any attributes with non-schema namespace...}>
  Content: (annotation | (simpleType | complexType | group | attributeGroup))*
</redefine>
```

## Schema corresponding to v2.xsd with the personName type redefined

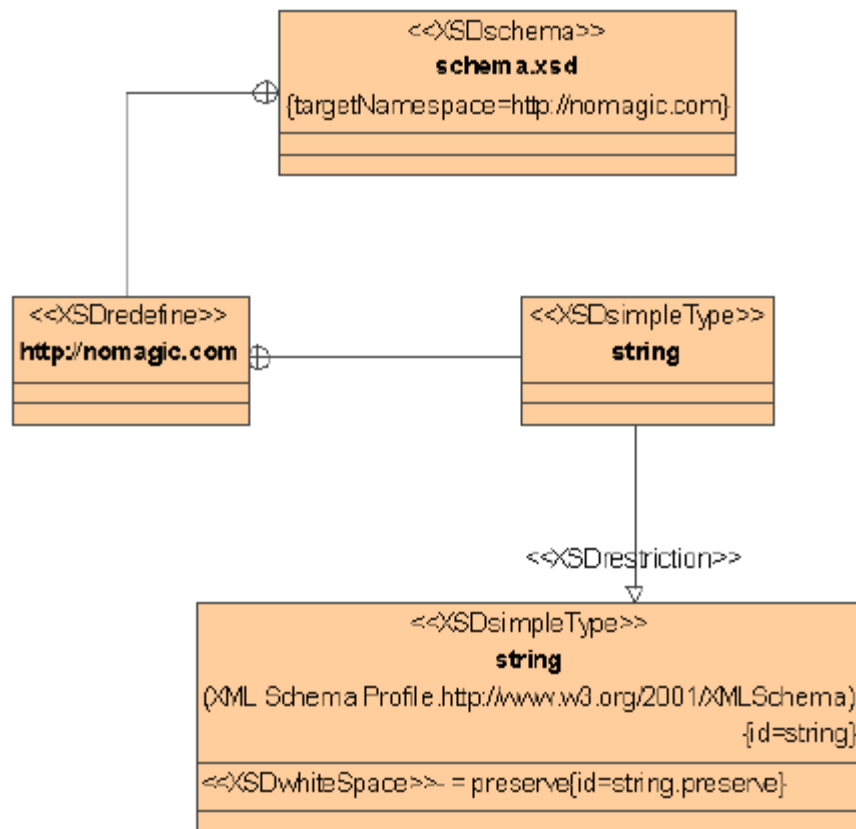
```
v1.xsd:
  <xs:complexType name="personName">
    <xs:sequence>
      <xs:element name="title" minOccurs="0"/>
      <xs:element name="forename" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

  <xs:element name="addressee" type="personName"/>

v2.xsd:
  <xs:redefine schemaLocation="v1.xsd">
    <xs:complexType name="personName">
      <xs:complexContent>
        <xs:extension base="personName">
          <xs:sequence>
            <xs:element name="generation" minOccurs="0"/>
          </xs:sequence>
        </xs:extension>
      </xs:complexContent>
    </xs:complexType>
  </xs:redefine>

  <xs:element name="author" type="personName"/>
```

The schema corresponding to *v2.xsd* has everything specified by *v1.xsd*, with the *personName* type redefined, as well as everything it specifies. According to this schema, elements constrained by the *personName* type may end with a *generation* element. This includes not only the *author* element, but also the *addressee* element.



redefine UML model example.

#### redefine XML code sample

```

<?xml version='1.0' encoding='UTF-8'?

<xs:schema xmlns:nm="http://nomagic.com" xmlns:xs="http://www.w3.org/2001/XMLSchema" targetNamespace="http://nomagic.com">
  <xs:redefine schemaLocation="http://nomagic.com">
    <xs:simpleType name="string">
      <xs:annotation>
        <xs:documentation>my documentation</xs:documentation>
      </xs:annotation>
      <xs:restriction base="xs:string" />
    </xs:simpleType>
  </xs:redefine>
</xs:schema>

```