

Best Practices in a Nutshell

Below is a very brief synopsis of the Best Practice guidelines. Each of the items will be elaborated upon in great detail in the following guidelines.

1. Make targetNamespace the default namespace.
2. Make two identical copies of all your schemas, where the copies differ only in the value of elementFormDefault (in one copy set elementFormDefault="qualified", in the other copy set elementFormDefault="unqualified")
3. Uniquely identify all schema components with the id attribute. Note: this is NOT the same thing as creating an element with an attribute that has an ID-datatype. Rather, what is being referred to here is the capability to associate an id attribute with every schema component (types, elements, attributes, etc). Here are some examples:

```
<xsd:element name="elevation" type="xsd:integer"
             id="flight:aircraft:elevation"/>
<xsd:complexType name="publication" id="wrox:book:publication"/>
```

This provides a finer level of granularity for identifying components than does namespaces, which provides only a course level of granularity.

4. Postpone decisions as long as possible.
 - 4.1 Postpone binding schema components to a namespace.

Corollary: Don't give schema's a targetNamespace. Let schemas which <include> your no-namespace schema supply a targetNamespace, *one that makes sense to the <include>ing schema*
 - 4.2 Postpone binding a type reference to an implementation, i.e., use dangling types.

Corollary: In an <import> element the schemaLocation attribute is optional. Don't use it.
5. Create extensible schemas.
 - 5.1 Recognize your limitations as a schema designer, i.e, be smart enough to know that you're not smart enough to anticipate all the varieties of data that an instance document author might need to use in creating an instance document.

Corollary: use the <any> element.
6. Recognize that with XML Schemas you will not be able to express all your business rules. Express those business rules using either XSLT or Schematron.