



[Home](#) | [Download](#) | [PDF](#) | [API](#) | [FAQ](#) | [Search](#) | [Feedback](#) | [History](#)

The Document Object Model APIs

[Figure 4-2](#) shows the DOM APIs in action.

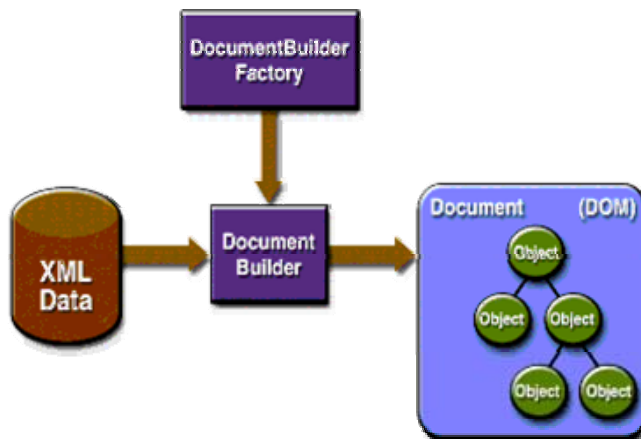


Figure 4-2 DOM APIs

You use the `javax.xml.parsers.DocumentBuilderFactory` class to get a `DocumentBuilder` instance, and you use that instance to produce a `Document` object that conforms to the DOM specification. The builder you get, in fact, is determined by the system property `javax.xml.parsers.DocumentBuilderFactory`, which selects the factory implementation that is used to produce the builder. (The platform's default value can be overridden from the command line.)

You can also use the `DocumentBuilder` `newDocument()` method to create an empty `Document` that implements the `org.w3c.dom.Document` interface. Alternatively, you can use one of the builder's parse methods to create a `Document` from existing XML data. The result is a DOM tree like that shown in [Figure 4-2](#).

Note: Although they are called objects, the entries in the DOM tree are actually fairly low-level data structures. For example, consider this structure: `<color>blue</color>`. There is an *element node* for the `color` tag, and under that there is a *text node* that contains the data, `blue`! This issue will be explored at length in the DOM section of the tutorial, but developers who are expecting objects are usually surprised to find that invoking `getNodeValue()` on the element node returns nothing! For a truly object-oriented tree, see the JDOM API at <http://www.jdom.org>.

The DOM Packages

The Document Object Model implementation is defined in the packages listed in [Table 4-2](#).

Table 4-2 DOM Packages

Package	Description
<code>org.w3c.dom</code>	Defines the DOM programming interfaces for XML (and, optionally, HTML) documents, as specified by the W3C.
<code>javax.xml.parsers</code>	Defines the <code>DocumentBuilderFactory</code> class and the <code>DocumentBuilder</code> class, which returns an object that implements the W3C Document interface. The factory that is used to create the builder is determined by the <code>javax.xml.parsers</code> system property, which can be set from the command line or overridden when invoking the <code>newInstance</code> method. This package also defines the <code>ParserConfigurationException</code> class for reporting errors.