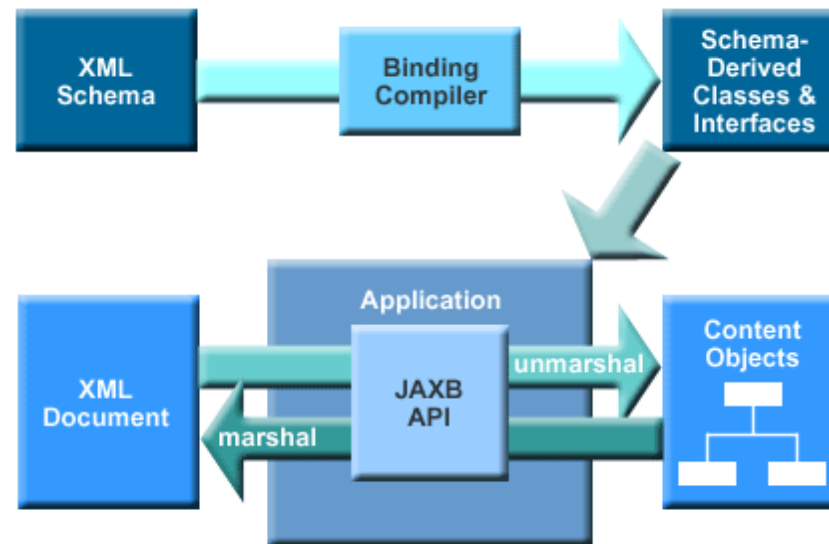


Java API for XML Binding (JAXB)

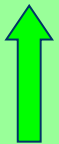

Mario Arrigoni Neri



JAXB



JAXB vs DOM

	JAXB	DOM
Pro 	<ul style="list-style-type: none">• Codice leggibile• Integrazione con il modello dell'applicazione• IDE	<ul style="list-style-type: none">• Neutro rispetto al linguaggio
Contro 	<ul style="list-style-type: none">• E' specifico del un linguaggio• Richiede ricompilazione se cambia il linguaggio• Performance (usa DOM)	<ul style="list-style-type: none">• Complesso• Integrazione non naturale con il livello applicativo

Compilazione dello schema



```
<xsd:element name="libreria">
  <xsd:complexType>
    <xsd:sequence>
      <xsd:element name="libro"..
        <xsd:complexType>
          <xsd:attribute...
        </xsd:complexType>
      </xsd:element>
    </xsd:sequence>
  </xsd:complexType>
</xsd:element>
```

..

```
xjc.sh -p testpackage books.xsd
```

ObjectFactory.java
Libreria.java

Classi generate

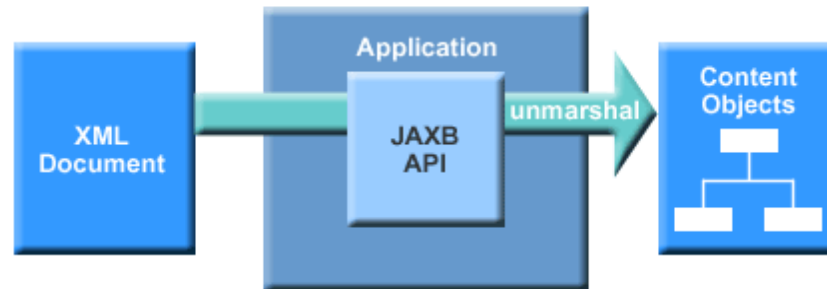
Libreria.java

```
@XmlAccessorType(XmlAccessType.FIELD)
@XmlType(name = "", propOrder = {"libro"})
@XmlRootElement(name = "libreria")
public class Libreria {
    @XmlElement(required = true)
    protected List<Libreria.Libro> libro;
    ...
    @XmlAccessorType(XmlAccessType.FIELD)
    @XmlType(name = "")
    public static class Libro {
        @XmlAttribute(required = true)
        protected String titolo;
        ...
    }
}
```

Manipolazione dell'albero

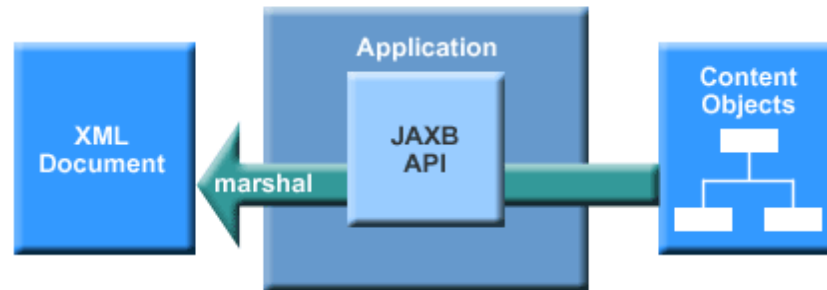
```
Libreria l = new Libreria();  
Libro libro = new Libro();  
libro.setAutore("Mario");  
libro.setTitolo("Introduzione all'IC");  
l.getLibro().add(libro);
```

Unmarshall



```
import javax.xml.bind.*;  
  
JAXBContext jc = JAXBContext.newInstance("test.jaxb");  
Unmarshaller unmarshaller = jc.createUnmarshaller();  
Object root = unmarshaller.unmarshal(new File( "books.xml"));
```

Marshall



```
import javax.xml.bind.*;
```

```
JAXBContext jc = JAXBContext.newInstance("test.jaxb");
```

```
Marshaller marshaller = jc.createMarshaller();
```

```
marshaller.marshal(collection, new FileOutputStream("jaxbOutput.xml"));
```