

Supported Data Types

Table of contents

- 1 Standard Java Types.....2
- 2 JavaBeans.....2
- 3 Collections and Arrays.....2
- 4 XmlBeans.....2
- 5 Attachments..... 2
- 6 Other Types.....2

The following is a list of the types supported for use as parameters and return values in Beehive Web Services.

1. Standard Java Types

All standard Java types as specified in section 5.1 of the JAX-RPC spec (JSR-101) are supported. These types include some core Java classes that can easily convert to Strings (section 5.1.3), primitives, exceptions and arrays of types already deemed suitable.

2. JavaBeans

Java Value types (section 5.4 of JAX-RPC) are supported. These are standard JavaBeans with the requirements that (1) they have a default no argument constructor, (2) implement `java.io.Serializable`, but (3) do not implement `java.rmi.Remote`.

3. Collections and Arrays

Collections are minimally supported: typed arrays are far superior. Support for JDK 5 typed Collections using Java Generics is being considered for the future. In the meantime use a typed array.

4. XmlBeans

XmlBeans are supported as web service types.

5. Attachments

DataHandler types provide attachment support in Apache Axis. If `activation.jar` and `mailapi.jar` are available, then developers can use `java.awt.Image`, `javax.mail.internet.MimeMultipart` as well as any classes extending `javax.activation.DataHandler` to transmit raw data as web service attachments. See the [Petstore Dashboard Sample](#) (`sample_Dashboard.html#Download+Required+JAR+Files`) for instructions on acquiring these JARs. If these types are used directly as return values or parameters, then the client must be an Axis client.

6. Other Types

If you wish to use types not declared here, you can explicitly register your own serialization mechanism by adding code to register `TypeMappings` for custom type classes in a static block of those classes. See the Axis documentation for more information: [XML <-> Java](#)

Supported Data Types

[Data Mapping in Axis](http://ws.apache.org/axis/java/user-guide.html#DataMapping) (<http://ws.apache.org/axis/java/user-guide.html#DataMapping>) (see the section labeled "When Beans Are Not Enough - Custom Serialization").

Java, J2EE, and JCP are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

© 2004, Apache Software Foundation