

RE: Nested objects?

Source:

<http://www.tech-archive.net/Archive/DotNet/microsoft.public.dotnet.framework.aspnet.webservices/2005-10/msg001>

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 - *Date:* Tue, 18 Oct 2005 14:56:42 -0700
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It depends of what you have (or could have) on the other side... I mean, all the app.consumers are .NET based or they could be from any other platform like Java?

A.- METHOD ONE.

If you have .NET on both end-points (WS and consumer) you can use DataSets (because DataSets are automatically serialized to XML), within that DataSet, one DataTable could be for the main Order and another DataTable could be for Order details. This is the easiest way to do it with .NET.

To do so, just return a DataSet as a return function value from your WebMethod and get it from the consumer App. It is straight forward and extremely easy.

BUT, using DataSets have several handicaps:

- 1.- You'll have interoperability problem if you want to consume your WebService from any other platform like Java, because of DataSet's Schema issues. Take into account that .NET DataSets (like Vectors in Java) are platform specific types that can't be represented easily in other platforms. This is because there is currently no single well-defined mapping between such platform-specific types and XML. Just because a .NET client can recognize a blob of XML as a Dataset, it doesn't mean a Web service client written in Java can do the same. Interoperability problems arise as a result.
- 2.- Depending of your bandwidth, DataSets are a bit heavy (big XML structures).

B.- METHOD TWO.

The other way is to use plain Classes and structures, and define first your WSDL (it is called "Contract First"), and serializing those classes using Attributes, etc. This way, you'll have to work a little bit more (more programming) but because you are defining "The Contract First" (WSDL), it will be interoperable with any other platform like Java. It also will have more performance because SOAP messages will likely have a lighter schema and XML.

To use plain classes and serializing by your self, take a look to this URL:

- Exposing custom-made classes through a Webservice and binding them to a DataGrid

<http://www.codeproject.com/vb/net/leaditwebservicewrapper.asp>

This is a really nice article.

And:

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– Contract First Web Services Interoperability between Microsoft .NET and IBM WebSphere:

<http://msdn.microsoft.com/vstudio/java/interop/websphereinterop/default.aspx>

BTW, about your question (using ArrayLists), here you have an example. BUT using ArrayLists IS NOT INTEROPERABLE either. If all you have is .NET, great. But if you have Java on the other point..., you'll have problems:

```
namespace Orders
{
[WebService(Namespace="http://services.orders)]
public class OrdersService: WebService
{

public struct Product {
public string name;
public int qty;
public float price;
}

[WebMethod]
[XmlInclude(typeof(Product))]
public ArrayList updateOrderProducts(ArrayList products)
{
ArrayList newList = new ArrayList();
IEnumerator eList = products.GetEnumerator();
while(eList.MoveNext())
{
Product item = (Product)(eList.Current);
// DO whatever, f.i. updating each product...
newList.Add(item);
}
//Return Updated Products
return newList;
}
}
} (I have not tested this sample, just wrote it like it can be)
```

So, it depends of your scenario.

Of course, if all you have is .NET and you are starting with WebServices, DataSets and ArrayLists are really easy.

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RE: Nested objects?

"Arjen" wrote:

> Hi.

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> I want to make a webservice that returns an order with orderlines.

> How can this be best done?

>=

> Can this be done with an object order (class order) that has a property

> arraylist of orderline objects (class orderline)?

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> Hope someone can help, thanks!

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>=

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• **Follow-Ups:**

◆ **Re: Nested objects?**

◇ **From: Arjen**

• **References:**

◆ **Nested objects?**

◇ **From: Arjen**

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