

C# generated .NET stubs break on a null return of a complex object

Source:

<http://www.tech-archive.net/Archive/DotNet/microsoft.public.dotnet.framework.webservices/2005-02/0209.html>

From: Dan A (A_at_discussions.microsoft.com)

Date: 02/08/05

Date: Tue, 8 Feb 2005 13:13:10 -0800

I have a SOAP written in Java, and being served by Apache Axis – using the wrapped mode. I then used VS 2003 to generate C# client stubs.

I have many complex types that are returned – and these work fine for the most part.

The current problem I have (Which appears to be a bug with .NET – but I can't seem to find a place to report .NET bugs without paying money) is that when I call a method that returns an array of one of my own complex object types – and the resulting array is empty – .NET throws a very nasty SOAPException that actually has nothing to do with the problem.

When I make this same call with my java client – here is the SOAP message that is sent to the server:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

  <soapenv:Body>
    <lookupConceptCodesByDesignation xmlns="urn://hl7.org/CTSVAPI">
<codeSystem_id>ne=uri:iso:2.16.840.1.113883.6.2/PROC,ra=HL7</codeSystem_id>
    <matchText>Appendix</matchText>
    <matchAlgorithm_code>StartsWithIgnoreCase</matchAlgorithm_code>
    <language_code xsi:nil="true" />
    <activeConceptsOnly>>false</activeConceptsOnly>
    <timeout>15000</timeout>
    <sizeLimit>50</sizeLimit>
    </lookupConceptCodesByDesignation>
  </soapenv:Body>
</soapenv:Envelope>
```

And here is the response:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
```

microsoft.public.dotnet.framework.webservices: C# generated .NET stubs break on a null return of a complex object

```
xmlns:xsd="http://www.w3.org/2001/XMLSchema"  
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">  
  <soapenv:Body>  
    <lookupConceptCodesByDesignationResponse xmlns="urn://hl7.org/CTSVAPI" />  
  </soapenv:Body>  
</soapenv:Envelope>
```

As you can see, the response object is basically empty – because there were no results. The java code actually returned an empty array – and this is the SOAP message that was generated.

When .NET receives this message – rather than giving me a null or empty array of ConceptId objects, as it should – it throws this exception:

```
System.Web.Services.Protocols.SoapException: Tried to invoke method public  
org.hl7.CTSVAPI.ConceptId[]  
org.hl7.CTSVAPI.sql.refImpl.BrowserOperationsImpl.lookupConceptCodesByDesignation(java.lang.String,java.lang.  
throws  
org.hl7.CTSVAPI.BadlyFormedMatchText,org.hl7.CTSVAPI.UnknownCodeSystem,org.hl7.CTSVAPI.UnknownLanguage)  
with arguments  
java.lang.String,java.lang.String,java.lang.String,java.lang.String,java.lang.Boolean,java.lang.Integer,null.  
The arguments do not match the signature.; nested exception is:  
    java.lang.IllegalArgumentException  
    at  
System.Web.Services.Protocols.SoapHttpClientProtocol.ReadResponse(SoapClientMessage message,  
WebResponse response, Stream responseStream, Boolean asyncCall)  
    at System.Web.Services.Protocols.SoapHttpClientProtocol.Invoke(String  
methodName, Object[] parameters)  
    at  
CTS_Demo.browser.BrowserOperationsService.lookupConceptCodesByDesignation(String  
codeSystem_id, String matchText, String matchAlgorithm_code, String  
language_code, Boolean activeConceptsOnly, Int32 timeout, Int32 sizeLimit) in  
c:\visual studio projects\ctsdemotool\cts demo\web  
references\browser\reference.cs:line 168  
    at CTS_Demo.CTSDemo.search(String text) in c:\visual studio  
projects\ctsdemotool\cts demo\ctsdemo.cs:line 86
```

Which as you can see, makes no sense whatsoever.

I can provide more information as necessary – but I'm basically just trying to figure out how to report this error to the .NET developers.