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1 Introduction

1.1 Current Release and Updates

The documentation is for release 0.3.0 (beta 3) published at 9.10.2003
Updates can be found at the project web-site:

<http://sourceforge.net/projects/wscep/>

1.2 Requirements

Eclipse 2.1.1 or newer. (<http://www.eclipse.org>)
JDK 1.4 or newer: (<http://java.sun.com>)

1.3 About

The SOAP message sender plugin is a view in the Eclipse IDE from which raw SOAP messages can be sent to a web service.

Normally one sends messages programmatically, but sometimes it is handy to have a way of sending the raw SOAP messages to the web service directly, especially with interoperability issues between different implementations of the SOAP specification.

Although developed based on a need to send raw SOAP messages, the plugin can also be used to call any XML based service over HTTP, or even non-XML based services.

1.4 How To Install

The zip file contains the plugin directory. Unzip from within the Eclipse plugin directory.

To uninstall, remove the nl.okc.eclipse.soap.rawmessage_x.x.x (where x.x.x denotes the version of the plugin you have installed).

1.5 Quick Tutorial

For this tutorial we will use Bob Swart's roman numbers <-> digital numbers conversion web service.

First of all, open the "Show View" window: Window->Show View->Other...
In this window, open the "OKC" category and double click on "Soap Message Console". This will open the "Soap Message Console" view.

In the "Soap Message Console" view:

Enter "http://www.ebob42.com/cgi-bin/Romulan.exe/wsdl/IRoman" (without the quotes) in the "Web Service URL" text field. Leave the "Request:" field empty and click the play button (leftmost button). The response field will now contain the WSDL of the web service.

Now click on the "New Tab" button (second button from the left). This opens a new tab. Enter "http://www.ebob42.com/cgi-bin/Romulan.exe/soap/IRoman" in the "Web Service URL" field. Note, the URL points to soap/IRoman instead of wsdl/IRoman, we are now pointing to actual the web service itself.

Enter the following raw SOAP request in the "Request:" field:

```
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:soapenc="http://schemas.xmlsoap.org/soap/encoding/"
  xmlns:n="x">
  <soap:Body soap:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
    xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/">
    <n:IntToRoman>
      <Int xsi:type="soapenc:long">1992</Int>
    </n:IntToRoman>
  </soap:Body>
</soap:Envelope>
```

Press play and see how 1992 is converted into MCMXCII.

1.6 Limitations and known problems

The WSDL request and response fields are a bit dumb and have no XML completion. There is no firewall and https support yet. Control over the HTTP protocol is a bit limited (no control over headers, time-outs, etc.).

Another problem is the fact that a DOM parser is used to do the indenting. I could not find the right combination of parsers/ XML libraries provided by Eclipse to make the indenting work with a SAX parser. I did not feel like distributing another XML library with the plugin or writing an indentation engine myself. So indenting the response is a bit slower and takes a bit more memory than needed.

The WSDL Parser is not complete. It works for some example WSDL files. So if there are other WSDL files which do not work feel free to report these WSDL files so we can support the new types in the next release.

Also have a look at the [missing WSDL features](#) website.

1.7 Bugs, Feedback

In case you run into problems, or if you have any suggestions, please send me an email at emiel@okc.nl. Please prefix the subject line [SOAPMC], so I can filter the messages into my Soap Message Console mail folder. TIA.

Updates can be found on the OKC web site, open source products. Hoping this plugin proves to be as usefull to other web service developers as it is to me already.

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Ferenc Hechler (WSDL related topics)
ferenc_hechler@users.sourceforge.net

2 WSDL Example

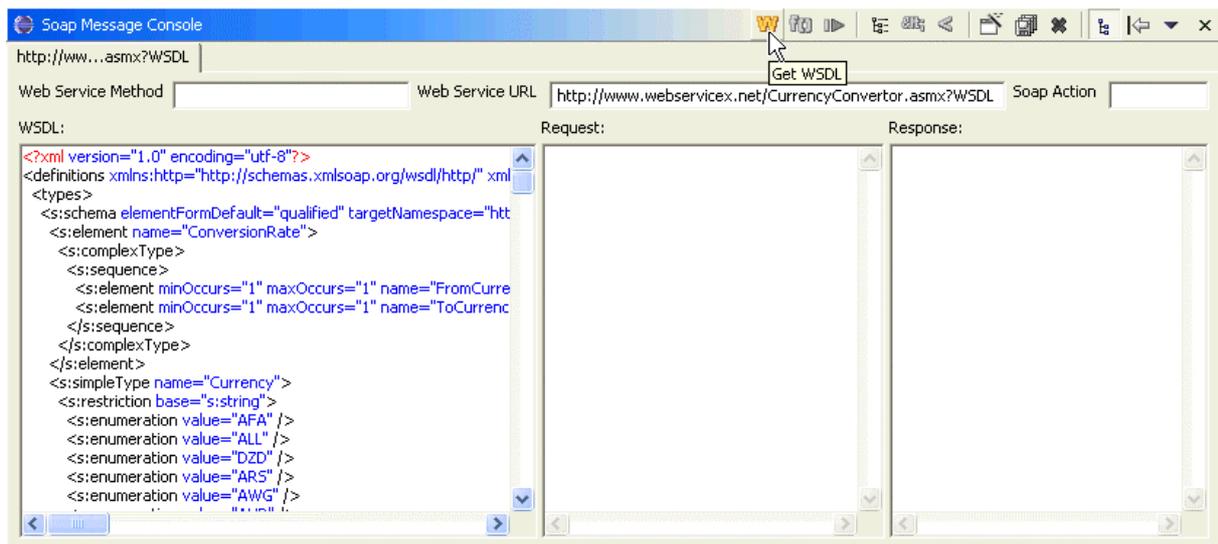
2.1 Creating a Soap Request from WSDL and sending it

Step 1: Get WSDL Text from URL

Input the Web Service URL: "http://www.webservice.net/CurrencyConvertor.asmx?wsdl"

Click the "Get WSDL" icon.

The result is shown in the Text-Field "WSDL".



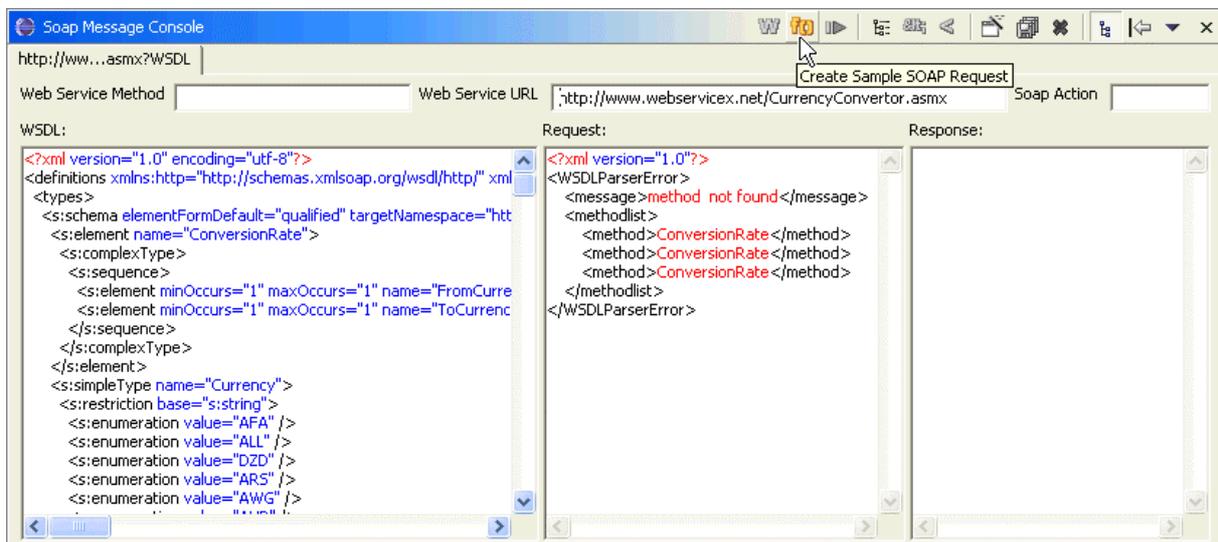
Step 2: Create list of methods from WSDL

Leave the input-field "Web Service Method" empty and click "Create Sample SOAP Request"

In the text-field "Request" a list of all supported methods from the WSDL Text is generated.

A method can appear more than once if there are different ports.

The "Web Service URL" field is automatically set to the endpoint of the Web-Service.



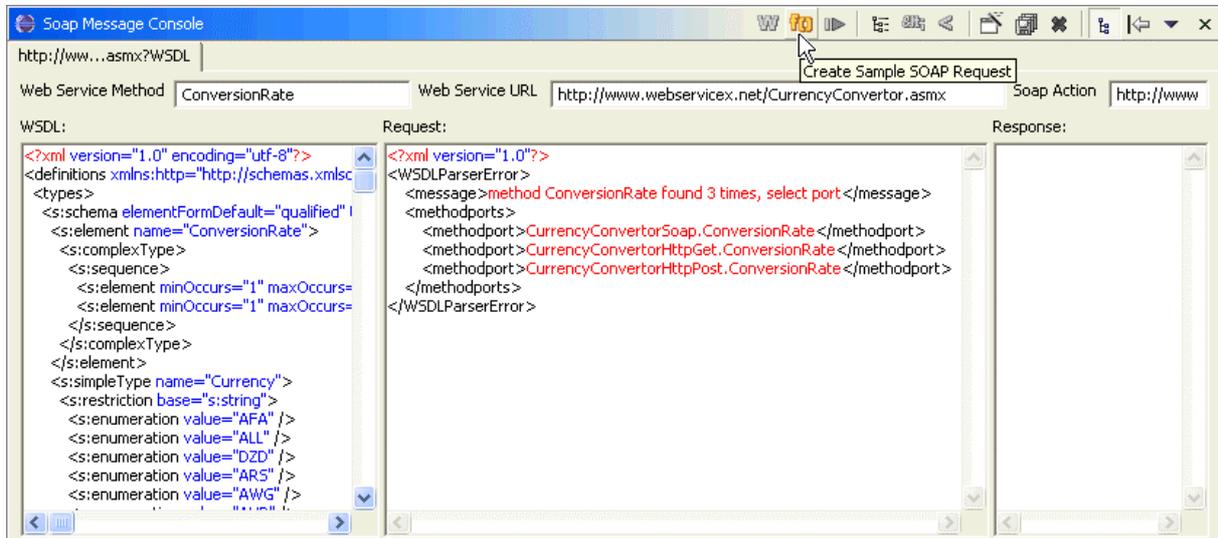
Step 3: Create list of ports for a method from WSDL

Enter one of the methods listed in step 2 in "Web Service Method" - here "ConversionRate".

Click the "Create Sample SOAP Request" icon.

If the method has more than one port a list of all ports for this method is generated in the "Request" field.

If the method only has one port this port is selected and the Request (as in step 4) is generated.

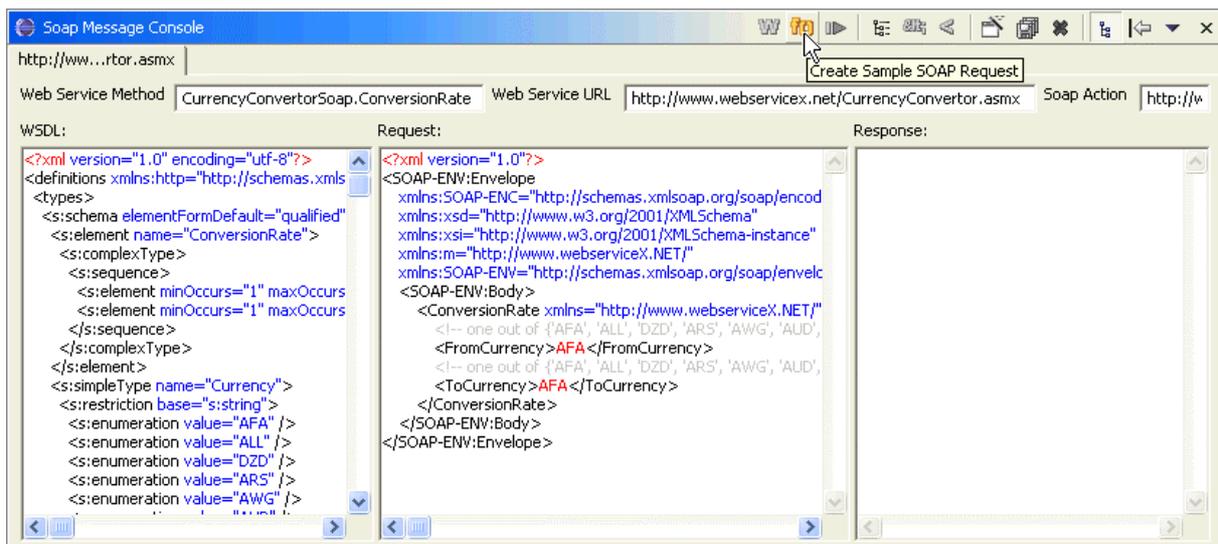
**Step 4:** Create Soap Request-Dummy for a method and port from WSDL

Enter the port and method separated by a dot in "Web Service Method" – here "CurrencyConvertorSoap.ConversionRate".

Click the "Create Sample SOAP Request" icon.

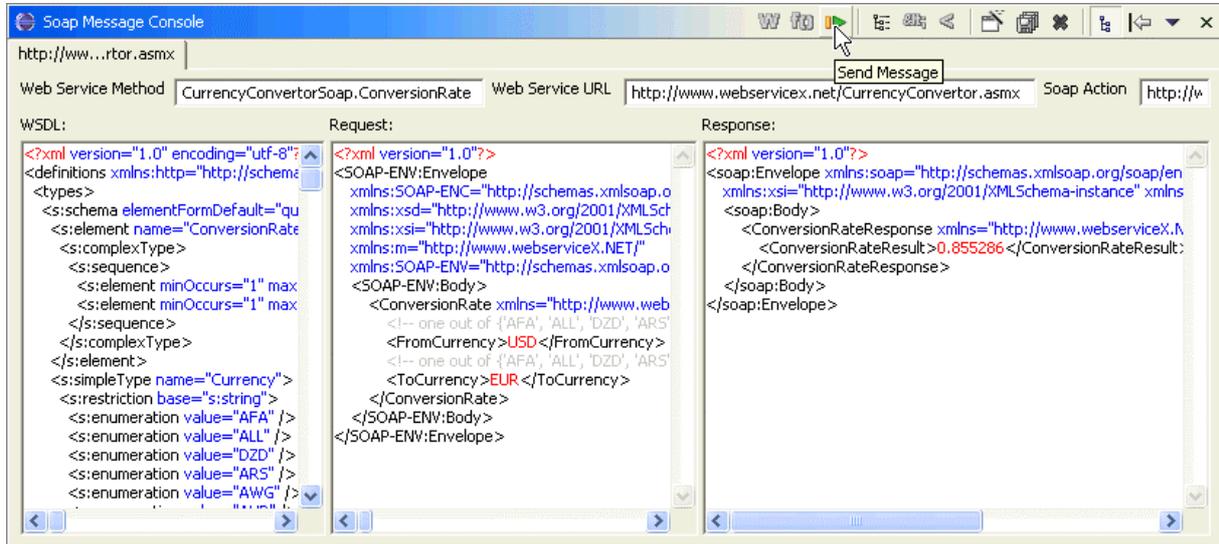
A Dummy SOAP Request is generated. The Values for input are shown in read.

The "Soap Action" header field is automatically set for this method.



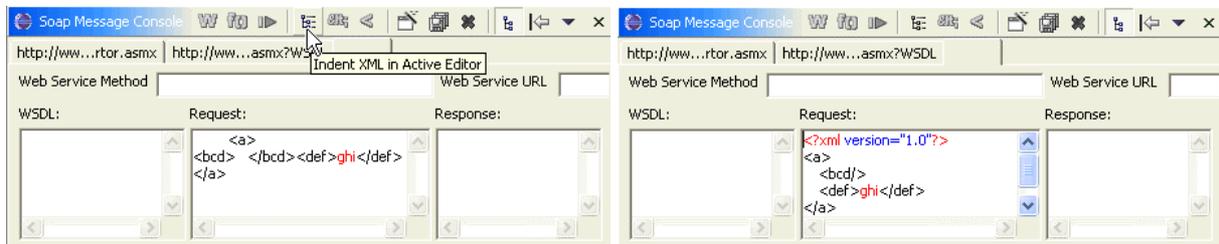
Step 5: Send Soap Request

Edit the dummy-values in the “Request” text-field – here “FromCurrency” → “USD”,
 “ToCurrency” → “EUR” (look at the comments above)
 Click the “Send Message” icon.
 After a short while the Answer of the Web-Service is shown in the “Response” field.



2.2 Indenting current Text-field

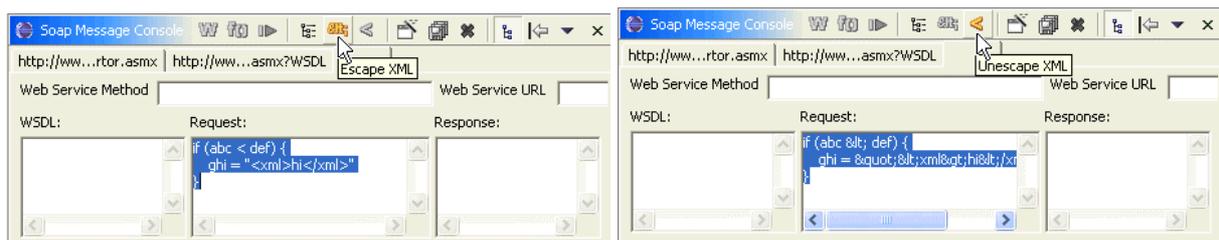
When editing XML the indentation can be done automatically by clicking the “Indent XML in Active Editor” icon.



2.3 XML Escaping

The red dummy-values in the generated Soap Request may not contain XML Characters, which means you have to escape e.g. “<” with “<”.

There are an “escape XML” and “unescape XML” icon which work on the current selection.



Appendix

Missing WSDL Features

The following features are known to be missing in the current release or nice to have's for the next release

- import from file / export to file of binary types (base64Binary and hexBinary)

Please send WSDL-related feedback to ferenc_hechler@users.sourceforge.net.

Also have a look at the [missing WSDL features](#) website.