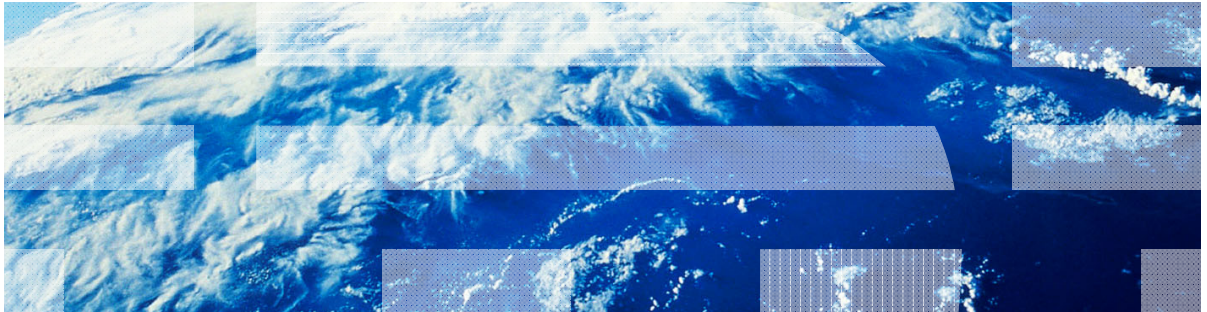


IBM Worklight V5.0.5

Getting Started

Module 5.3 – Using HTTP adapters with SOAP Services



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Agenda

- Creating SOAP-based service requests
- Invocation parameters

Creating a SOAP-based Service Request

- The `WL.Server.invokeHttp` method can be used to create a SOAP envelope which can be sent directly.
 - To invoke a SOAP-based service in an HTTP adapter, you need to encode the SOAP XML envelope within the request body
 - Encoding XML within JavaScript is simple by using E4X, which is officially part of JavaScript 1.6
 - This technology can be used to encode any type of XML document, not only SOAP envelopes
- If you receive error messages for SOAP envelopes, disable the JavaScript validator
 - Click **Project > Properties > Builders** and clear **JavaScript Validator**

Creating a SOAP-based Service Request

- Use JavaScript to create a SOAP Envelope

```
var request =
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
"http://schemas.xmlsoap.org/soap/envelope/">
  <soap:Body>
    <CelsiusToFahrenheit xmlns="http://tempuri.org/">
      <Celsius>{celsiusTemp}</Celsius>
    </CelsiusToFahrenheit>
  </soap:Body>
</soap:Envelope>;
```

Creating a SOAP-based Service Request

- It is possible to insert Java™ code and variables into SOAP XML. It is evaluated at run time.

```
var request =
<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/">
  <soap:Body>
    <messageHeader>
      <originatingIP>
        { WL.Server.configuration["local.IPAddress"] }
      </originatingIP>
      <requestTimestamp>
        { new Date().toLocaleString() }
      </requestTimestamp>
    </messageHeader>
    <ConversionRate xmlns="http://www.webserviceX.NET/">
      <FromCurrency>USD</FromCurrency>
      <ToCurrency>EUR</ToCurrency>
    </ConversionRate>
  </soap:Body>
</soap:Envelope>;
```

Agenda

- Creating SOAP-based service request
- Service request invocation

Service Request Invocation




- The `WL.Server.invokeHttp(options)` method is used to invoke a request for a SOAP service
- The Options object must include the following properties:
 - A method – usually POST
 - A `returnedContentType` – usually XML
 - A path – a service path
 - A body
 - `content` – SOAP XML as a string
 - `contentType`

```
var options = {
  method : 'post',
  returnedContentType : 'xml',
  path : '/webservices/tempconvert.asmx',
  body: {
    content: request.toString(),
    contentType: 'text/xml; charset=utf-8'
  }
};
```


Service Request Invocation, Cont.

- Full SOAP-based service invocation procedure example

```
function temperatureConvertor(celsiusTemp) {  
    // Use USD and EUR as fromCurrency and toCurrency variables. Case is impo  
  
    var request =  
        <soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
            "http://schemas.xmlsoap.org/soap/envelope/">  
            <soap:Body>  
                <CelsiusToFahrenheit xmlns="http://tempuri.org/">  
                    <Celsius>{celsiusTemp}</Celsius>  
                </CelsiusToFahrenheit>  
            </soap:Body>  
        </soap:Envelope>;  
  
    var input = {  
        method : 'post',  
        returnedContentType : 'xml',  
        path : '/webservices/tempconvert.asmx',  
        body : {  
            content: request.toString(),  
            contentType: 'text/xml; charset=utf-8'  
        }  
    };  
  
    var result = WL.Server.invokeHttp(input);  
  
    return result.Envelope.Body;  
}
```

 SOAP envelope Options Request invocation

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