Accessing Adabas through SoapUI

This simple scenario demonstrates how to invoke operations on an Adabas DataSource exposed as a "Web service" through SOA Gateway from SoapUI.

soapUI is a (freeware) desktop application for inspecting, invoking, developing and functional / load / compliance testing of web services over HTTP and can be downloaded here.

Additionally, soapUI can be integrated into the Eclipse framework, read here for more information.

1. When starting soapUI for the very first time an "empty" workspace is generated, right-click on the top-level **Projects** item, select **New WSDL Project** to create your first soapUI project.



You will be prompted for a project name, enter one and click OK:

| New WSD | L Project | × |
|---------|----------------------------------|---|
| ? | Enter project name ASGWindows | |
| | OK <u>A</u> bbrechen | |

Specify a target location for the project files, click Save:

| ≜ Create Pro | oject | | X |
|------------------------|-------------------------------|---|-------------|
| Spe <u>i</u> chern in: | 🗀 soapui | • | 🛍 🖄 🎬 🗄 |
| | | | |
| Datei <u>n</u> ame: | ASGWindows-soapui-project.xml | | |
| Da <u>t</u> eityp: | XML Files (*.xml) | | • |
| | | | Save Cancel |

2. Now import an SOA Gateway "web service" into the newly created project, right-click the project name, then select **Add WSDL from URL**

| 👙 SoapUI SNAPSHOT | | | |
|----------------------------|--|----------------------------------|-----------------|
| <u>F</u> ile <u>T</u> ools | <u>D</u> esktop <u>H</u> elp | | |
| Projects | indows | × > | |
| | Add WSDL from URL | Strg-U | |
| | Add W ⁴ Adds all interface: | s in a specified WSDL URL to the | current project |
| - | Generate WSDL with JBos | ssWS | |
| | New TestSuite | Strg-T | |
| | Rename | F2 | |
| | Remove | Entf | |
| | Save Project | Strg-S | |
| | Save Project As | Strg+Umschalt-S | |
| | 🕡 Online Help | F1 | |
| | | | |

Enter the URI of the adabas_Employees_special resource, as in

http://<yourASGserverhost>:<yourASGserverport>/adabas_Employees_special?WSDL and click **OK** to import the webservice definitions from the resources / WSDL



You will be asked if default requests for all operations are to be created, click Yes.

| Import | WSDL | | X |
|--------|-------------|------------------|----------------------|
| ? | Create | default requests | ; for all operations |
| | <u>Y</u> es | No | Cancel |

 Default requests have been generated for all SOA Gateway operations for a webservice, undfold the "list" request by clicking the **plus** sign left of it, right-click the created **Request 1**, select **Clone Request**, this allows for unlimited duplication of the original request, which may be desirable when testing various options or "canning" requests.

| 🕒 Projects | | |
|-----------------|-----------------------------------|------------|
| 🗄 🖳 🔁 ASGWindow | s | |
| 🗄 🖳 🗶 adabast | DemoEmployeesSpecialPor | rtType |
| 🗄 🗘 add | | |
| 🗄 🖒 🧔 dele | ete | |
| 庄 🧔 get | | |
| 🖃 🧔 list | | |
| | Request 1 | |
| | Open Request Editor | Eingabe |
| 4 | $\stackrel{L}{=}$ Add to TestCase | Strg+Alt-A |
| Q | 🗋 Clone Request | F9 |
| - | Constant of the | |
| | Creates a copy of this r | equest |
| | Delete | Entf |
| | 🕖 Online Help | F1 |
| | | |

Assign a name to the cloned request, click $\mathbf{O}\mathbf{K}$



4. soapUI now opens the request document.

| SoapUI SNAPSHOT | |
|---|--|
| <u>File T</u> ools <u>D</u> esktop <u>H</u> elp | |
| Projects → ASGWindows → A adabasDemoEmployeesSpe → 2 add → 2 delete → 2 get → 2 list → 3 Request 1 → 3 list_300000s → 2 update | <pre> Request: [list_300000s] - adabasDemoEmployeesSpecialPortType#list</pre> |
| | |
| Request Properties Property Value Name list_300000s Encoding LITE 9 Details Windows | Wed Nov 08 19:04:41 CET 2006:INFO:importing operation list Wed Nov 08 19:04:41 CET 2006:INFO:importing operation update soapui log http log |

Remove the soapenv:Header section, everything from, and including, <soapenv:Header> to </soapenv:Header>

This leaves you with the soap Body section, which holds all key information:

| Projects | 🔚 Request: [list_300000s] - adabasDemoEmployeesSpecialPortType#list |
|-----------------------|--|
| E- B ASGWindows | t- □ □ □ × http://acquindows:9022/adabas_Employees_special T □ □ □ □ ↓ □ |
| dabasDemoEmployees5pe | |
| H S add | Request Response |
| 🛨 🕂 😴 delete | |
| 🕀 🕀 🥰 get | <pre>soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/</pre> |
| 🛛 🗁 😴 list | <pre><soapenv:body> </soapenv:body></pre> |
| Request 1 | < Tull demokmployeespectalListlement> |
| | <pre><pre></pre></pre> |
| 🕀 🔁 update | (neme)2(/neme) |
| | <pre>shame< syntame< shirthday>?</pre> |
| | <pre>scitw>?</pre> /citw> |
| | <pre><department code="">?</department></pre> |
| | <job title="">?</job> |
| | 1 to 8 repetitions: |
| | anguage_spoken>? |
| | <leave_left></leave_left> |
| | <leave_due>?</leave_due> |
| | <leave_taken>?</leave_taken> |
| | |
| | <dept_person></dept_person> |
| | <pre><department code="">?</department></pre> |
| | |
| | SOAP Request Attachments (0) |
| • | 2:1 |

Remove all key elements but the personnel_id, enter 300000* as the key value, the request should look like this now, then click the **green arrow** to send the request to your SOA Gateway server:

| 🛅 Request: [list_300000s] - adabasDemoEmployeesSpecialPortType#list 📰 🖆 🔀 |
|--|
| 🔖 늘 🖸 🗖 🗶 http://asgwindows:8022/adabas_Employees_special 🔹 🛛 📊 + 🔞 |
| quest Response |
| <pre><soapenv:envelope :<="" td="" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"></soapenv:envelope></pre> |
| <pre><full:demoemployeespeciallistelement></full:demoemployeespeciallistelement></pre> |
| |
| |
| |

5. The response will look like this - formatted XML

This response shows "simple" as well as repeating fields like MUs (multiple value fields, here: olive arrows), PEs (periodic groups, pink arrows) and MUs within PEs (blue arrows):

