Exercise 5

Debugging SOAP flows by setting TCPMON as an HTTP Proxy

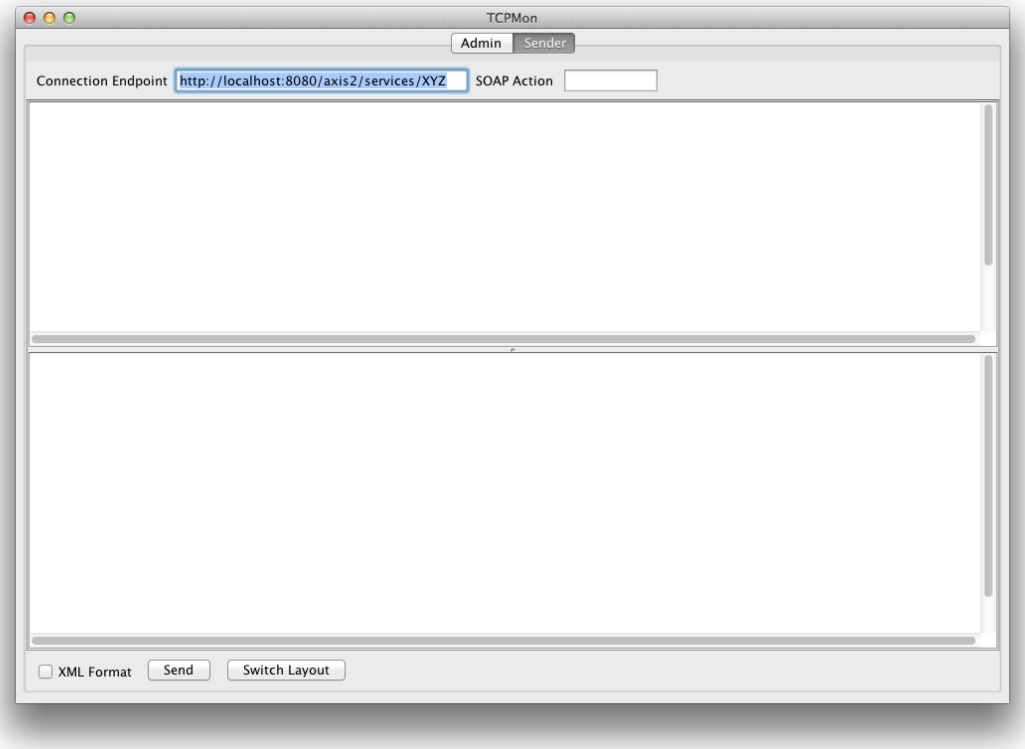
Prior Knowledge
Exercises 3 and 4 – creating a JAXWS Service and CXF Client.

Objectives
Learn to run TCPMON and configure your client to call via the client.

Software Requirements

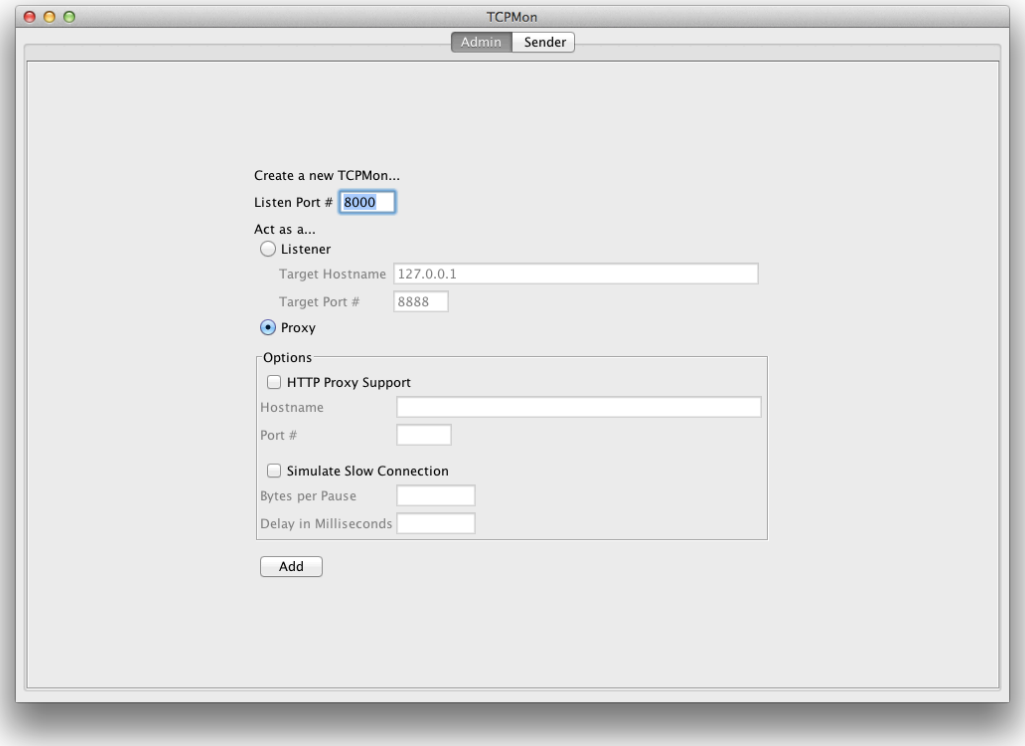
- Java Development Kit 7
- Tomcat 7.0.33 or later
- Eclipse JEE workbench
- Apache CXF 2.7.0 or later
- Service running from Exercise 3, Client from Exercise 4

1. You should have tcpmon in the VM.
2. cd ~/servers/tcpmon/build
3. ./tcpmon.sh
4. You should see a screen like this appear:



5. Now click on **Admin**

6. Enter 8000 as the listen port, Click on the Proxy button.



7. Click Add

8. Now select the new tab **Port 8000** that appears.

9. Change one of your clients to include the following lines which will make it use the Proxy:

   First add the following imports to your client.

   ```
   import org.apache.cxf.endpoint.Client;
   import org.apache.cxf.frontend.ClientProxy;
   import org.apache.cxf.transport.http.HTTPConduit;
   import org.apache.cxf.transports.http.configuration.HTTPClientPolicy;
   ```

   Now find the **port** object and just after it is initialized add:

   ```
   Client client = ClientProxy.getClient(port);
   HTTPConduit http = (HTTPConduit) client.getConduit();
   HTTPClientPolicy httpClientPolicy = new HTTPClientPolicy();
   httpClientPolicy.setProxyServer("localhost");
   httpClientPolicy.setProxyServerPort(8000);
   http.setClient(httpClientPolicy);
   ```

   This could also be set in an XML config file, but it is simpler for now to use Java. Now re-run your client and look at the trace in TCPMON. You might want to put it into XML mode.

The screenshot below is a rough approximation but based on a different client and server than you are currently using.