



Web Services Procedures

This chapter describes how to generate the Tidal Enterprise Scheduler (Scheduler) Web Services SOAP API.

Overview

The Scheduler Web Services SOAP API is published through a Web Service Definition Language (WSDL) document and its associated schema. The WSDL file defines available Web Service operations, binding, and access end points. The schema file defines operation parameters and additional data types.

Setting Up the Client User

The Scheduler Web Services SOAP API leverages the same authentication mechanism as the Tidal Enterprise Scheduler Web UI. The login for the client program requires a combination of username and password known to the Scheduler. To implement authentication for your client, the easiest way is to utilize the standard BindingProvider API of JAX-WS as shown in the code snippet below. More details are available in the supplied sample client in `<TESSoapClient>\src\com\tidalsoft\tesws\client\Console.java`.

```
TESWebService_Service tesws = new TESWebService_Service();
TESWebService teswsPort = tesws.getTESWebServicePort();
BindingProvider bindingProvider = (BindingProvider)teswsPort;
Map<String, Object> map = bindingProvider.getRequestContext();
map.put(BindingProvider.USERNAME_PROPERTY, username);
map.put(BindingProvider.PASSWORD_PROPERTY, password);
```

Before carrying out each operation, the Web Services API validates the given user account against the security and object access policy that the user has defined in the Scheduler to determine if the account has the privilege to perform that operation.

Generating the Scheduler Web Services SOAP API

This section describes how to generate the Scheduler Web Services SOAP API.

To generate the Scheduler Web Services SOAP API

Step 1 In a live Scheduler environment, go to the following websites to download the WSDL file and its associated schema files:

- <http://<hostname>:<port>/api/<DSP Name>/webservice/TESWebService?WSDL>
- http://<hostname>:<port>/api/<DSP Name>/webservice/TESWebService_schema1.xsd

Enter the following substitutions:

- **<hostname>** — Host name used to access the Scheduler Web Client (Scheduler Web UI)
- **<port>** — Port number used to access the Scheduler Web Client (Scheduler Web UI)
- **<DSP Name>** — Name of Data Source Provider of the target Scheduler Plug-in, which is the name that the user specifies when installing a Scheduler Plug-in

These documents conform to the following specifications:

- <http://www.w3.org/TR/wsdl> (SOAP 1.1)
- <http://www.w3.org/TR/2002/WD-wsdl12-20020709/> (SOAP 1.2)

Step 2 Generate the client source code in Java, C#, or other languages using a tool, such as **wsimport** that comes with JDK 1.6, as shown in the following example:

```
wsimport -keep -verbose -extension -s <Target Source Directory> -d <Target Build Directory> -p <Target Package Name> <WSDL File>
```

Step 3 Use the generated object classes to complete the client application.

For information on the sample client provided, see [Sample Client, page A-1](#).

For information on using the dateTime parameters in the Scheduler Web Services SOAP API, see [Date/Time Parameters, page B-1](#).