WITSML Service Connector

WITSML clients

- Name: **WITSML**
- Version 1.0.10.0
- Protocol: WITSML
- Interface: TCP/IP
- Runtime: .NET 2.0 (Multiplatform)
- Configuration:
    - JSON

Settings

Overview

T.Witsml.Service is a service running on **TWebServer** or **IIS.** It works as a "gateway" between any "**Witsml client**" and a project running on our platform. The project must have a **Script.Class** (Domain: **Server**) exposing some standard methods that will be consumed by this service.

T.Witsml.Service works with **Witsml 1.3.1.1 Specification**. It only exposes some **WMLS_GetFromStore: Well, Wellbore and Log.**

Settings

Below are methods that must be implemented in FS project:

- public Dictionary<string, string> GetServerInfo(string userName);
    - Returns information about sever.
- public List<List<KeyValuePair<string, string>>> GetWells(string userName, List<KeyValuePair<string, string>> queryInfo, Dictionary<string, string> propertyHelp);
    - Returns available wells according to requested items (queryInfo).
- public List<List<KeyValuePair<string, string>>> GetWellbores(string userName, List<KeyValuePair<string, string>> queryInfo, Dictionary<string, string> propertyHelp);
    - Returns available wellbores according to requested items (queryInfo).
- public List<List<KeyValuePair<string, string>>> GetLogs(string userName, List<KeyValuePair<string, string>> queryInfo, Dictionary<string, string> propertyHelp);
    - Returns available logs according to requested items (queryInfo).

An example of FS project can be found at "**Egnyte/Shared/FS_Projects_Tatsoft/Witsml/Server/WitsmlServerTest.tproj**". The project has a "**DataSet/DB**" called "**SQLDepth**". This provider connects to "SQL Server" using "**Windows Authentication**", so the project needs run inside of a context user (such as "rigdata.svc") that get connection to "**SQL Server**".

The next lines show settings whether you want change the default values for connection between **T.Witsml.Service** and FS project:
Inside **FactoryStudio\TWebServer.exe.config** and **FactoryStudio\fs-8.1\Web.exe.config** (used by **IIS**):

```
<add key ="Witsml-EnableLog" value="false"/>          // If true log messages are generated on "C:\ProgramData\FacrotyStudio\" folder
<add key ="Witsml-RemoteIP" value="localhost"/>       // TServer Computer IP
<add key ="Witsml-RemotePort" value="3101"/>          // TServer Port Number. WitsmlServerTest project runs on 3501 (port number)
<add key ="Witsml-RemotePortWA" value="3102"/>        // TServer WA Port Number
<add key ="Witsml-WA" value="false"/>                 // If true connects to FS runtime using  "Witsml-RemotePortWA"
<add key ="Witsml-ClassName="WitsmlServer"/>          // Script class name where methods are exposed
```

Testing

For testing follow steps:

1. Use "fs-2016.2.103" or "fs-8.1.7" .
2. Run "TWebServer.exe";
3. Run FS project: WitsmlServerTest.
4. Information used in "Witsml Client":
    a. Host: http://<IP>:<TWebServerPort>/fs-2016.2/T.Witsml.Service.svc
    b. Authentication: Basic
        i. User: Administrator
        ii. Pass: <blank>

⚠ The validation of users is performed by FS "runtime", i.e., any user (Eng, RT) can be used.

IIS also be used as **WebServer**. In this case "**https**" is required with **Basic Authentication** enabled, and the validation of users is performed by **Windows**, i.e., it is necessary create user in local account of Windows.

In this section...
