WITSML Certification Application Tool wCAT

# Introduction

The WITSML Certification Application Tool (wCAT) is an add-on to the current WITSML certification testing tool currently managed by Energistics.

wCAT is a windows application that simplifies the installation and running of the WISTML certification test tool. It bundles a graphical user interface utility with a released version of the WITSML test tool and a released version of the certification scripts. All integrated together into a simple to install self-extracting executable.

# Installation

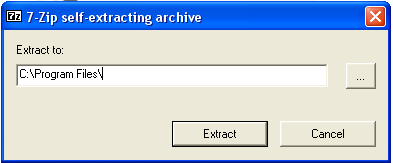
An installer file is provided for the installation of wCAT. Since a specific released version of the WITSML test tool and a specific released version of the certification scripts are bundled into wCAT, a separate installer is required for each case. The installer file has the following naming convention

wCATM.N-tX.Y-sA.B

where M.N is the wCAT version, X.Y is the version of the certification tool and A.B is the version of the test suite. For example wCAT1.0-t1.0-s2.01 includes wCAT version 1.0, the released version 1.0 of the certification tool and the released version 2.01 of the test suite.

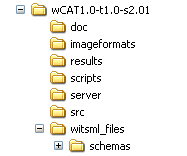
To install wCAT in Windows

1. Download and run the installer.
2. Once prompted, select a directory where you would like the installation to reside and press the ‘Extract’ button.



All the required files will be copied into the directory you specified.

The resulting directory structure (under the specified directory) should look like:



The detailed wCAT documentation (wCAT Manual.docx) can be found in the ‘doc’ directory.

# Installation Removal

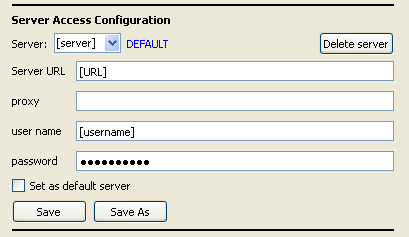
To remove wCAT simple delete the directory specified during installation (e.g. wCAT1.0-t1.0-s2.01)

# wCAT Utility

To run the wCAT main application, execute the wcat.exe executable

## Running for the first time

The first time wCAT is run, placeholders for the server access parameters are populated



To be able to run certifications tests, the following steps should be done:

1. Create a new server profile with the access parameters for the desired server. Make the newly created server access profile, the default profile
2. Delete the placeholder [server] access profile

See the next section for detailed instructions in how to perform those 2 steps

## Server Access Configuration

The information required to access a WITSML server includes the server URL, username, password and the proxy information to access the server. These set of parameters are grouped together in wCAT as a *Server Access Profile* and named with the server name.

Multiple Server Access Profiles can be created and at any time they can be updated or deleted. A single access profile is marked as the default profile and is the one used when wCAT first starts up.

Server profiles are stored in the ‘server/server\_access\_profiles.ini’ file. We recommend not t edit this file directly.

The default profile is stored in the ‘server/default\_server.py’ file and it is the access profile used by wCat at startup. Normally, the default profile will match a profile in the ‘server\_access\_profiles.ini’ file. However there is a possibility that this is not the case (see deleting the default server profile below)

* If the default profile name does not match one of the server profiles stored in ‘server\_access\_profiles.ini’, wCAT will add the default profile and show the message ‘Default access configuration profile for ‘[server name]’ created’ in the status bar
* If the default profile does match one of the server profiles stored in ‘server\_access\_profiles.ini’, but at least one of the access parameters is different, wCAT will used the default profile and show the message ‘Default access configuration profile for ‘[server name]’ updated’ in the status bar

The following sections describe how to manage the Server Access Profiles in wCAT

### Select a different Server Access Profile

To select a Server Access Profile:

* Click the desired profile in the ‘Server:’ drop box

If the selected Server Access Profile is the default profile, the ‘DEFAULT‘' label will be shown beside the server name

### Create a New Server Access Profile

To create a new Server Access Profile:

* Select one of the current access profiles as a starting point or select the <new> profile
* Set the values of the access parameters (URL, proxy, username, password)
* If you want to make this new Server Access Profile, the default profile:
  + Check the box ‘Set as default server’
* Click the ‘Save As’ button or select the ‘File | Save As…’ menu option
* Provide a new server name when prompted

### Change the Default Server Access Profile

To change the default Server Access Profile:

* Select the Server Access Profile you want to make the default
* Check the box ‘Set as default server’
* Click the ‘Save’ button or select the ‘File | Save’ menu option

### Update a Server Access Profile

To update a Server Access Profile:

* Select the Server Access Profile you want to update
* Set the values of the access parameters (URL, proxy, username, password)
* If you want to make this new Server Access Profile, the default profile:
  + Check the box ‘Set as default server’
* Click the ‘Save’ button or select the ‘File | Save’ menu option

### Delete a Server Access Profile

To delete a Server Access Profile:

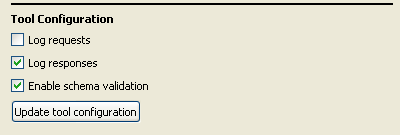
* Select the Server Access Profile you want to update
* Click the ‘Delete’ button

**IMPORTANT NOTE**: If the default Server Access Profile is deleted, it will not show in wCAT in the current session. However, this profile will remain the default profile and will be automatically added to the list of profiles, the next time wCAT is run.

To remove the default profile, make a different Server Access Profile the default profile either before or after deleting the default profile

## Tool Configuration

Tool configuration parameters can be changed at any time by checking/un-checking the corresponding check box in the ‘Tool Configuration’ area



To save the tool configuration for future uses of wCAT, click the ‘Update tool configuration’ button or selecting the ‘File | Update tool configuration’ menu option

For information about the tool configuration options please see the certification tool documentation

## Server Setup

Two special scripts are included in the test suite to help setup and control the data in the server in order to allow the certification testing.

Two executables are provided with wCAT to perform those functions. These executables can be run in a command window or from the wCAT GUI. Output from these executables is shown in a command window independently of how they are run.

**IMPORTANT NOTE**: These executables operate on the **DEFAULT SERVER**. It does not matter what the parameters in the ‘Server Access Configuration’ area or the ‘Status’ area in wCAT indicate. Make sure to set the default server properly before running these executables.

For more information about these two scripts see the certification tool documentation

### Loading the Data Set

To load the data set loader from a command window, run the following command

load\_data\_set.exe -a

To run the data set loader from wCAT, click the ‘Load data model’ button. When loading the data set form wCAT, the wCAT GUI will wait until the load program completes. If stopping of the script is required, press CTRL-C in the command window.

### Running the Data Grower

To run the data grower from a command window, run the following command

Data\_grower\_script.exe -a

To stop the grower from the command window, type CTRL-C.

To run the data grower from wCAT, click the ‘Start data grower script’ button. When running the data grower form wCAT, a separate process is created allowing the wCAT GUI to continue independently

To stop the data grower from wCAT, click the ‘Stop data grower script’ button.

If the data grower is controlled from wCAT, an indication of the status of the data grower is shown in the ‘Status’ section.

## Connect to the Server

To establish the initial connection to the server click the ‘Connect’ button in the ‘Certification Testing Area’. The server access parameters showing in the ‘Server Access Configuration’ area are used, even if they have been modified and have not been saved.

Connection status and other information is updated in the ‘Status’ area

## Running tests

To run a test from the test suite:

* Make sure you are connected to the server (see Connect to the Server above)
* Select the desired test (or the testsuite) from the drop box in the ‘Certification Testing’ area
* Click the ‘Execute test’ button

Output generated while running the test can be seen in the bottom right corner of wCAT. The window can be resized to increase the viewing area.

When running the test suite, the result file name can be specified by typing it in the ‘Test Suite Result Filename:’ edit box. This does not change the default name ‘witsml\_result.txt’ that will be used when the file name is not specified. The default file name used for the result file cannot be changed with wCAT.

The test drop box shows all the files in the ‘scripts’ directory. The test list is refreshed every time the drop box is clicked. Additional tests (besides the test suite) or modified tests can be run by placing the corresponding test script in that directory.

Tests can only be executed after establishing a connection with the server (see above). Only one test can be run at a time.

## Output Files

The output files (log files and result file) generated by the certification tool can be seen by selecting the ‘Results | View’ menu option. Simply select the file when prompted and view it in the window provided.

The window can be resized, scroll bars are provided for viewing and text can be selected and copied.

For information about the output files see the certification tool documentation

## Versions

The version of the test plan, the certification tool and the test suite are shown in the top left corner of wCAT

