IHE-RO 2013 Test tools

Test Tool Configuration Editor
## *User Manual*

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Scope of this document

This document describes the use of the Test Tool Configuration Editor. This tool is used to edit the configurations of the test tool. These configurations include AE-Title, Port and IP-address settings. Normally the settings are done in the Dicom Validation Toolkit. For the Integrated Positioning and Delivery Workflow profile the Dicom Validation Toolkit is not sufficient. That is because in some scenarios 3 actors are defined: TMS, TDD and OST.

The settings done with this tool will overrule the settings that can be done in the session files from DVTk.

1. Configuring AE-title and Ports

If Windows Vista or Windows 7 is used the TesttoolConfigurationEditor must run with the administrator account.
Go to the directory where the editor is installed. (default: C:\Program Files (x86)\IHE-RO\IHE-RO-TestTool-TDW-II-2013\2013 TestTool TDW-II\Sessionfiles\Scripts\TestToolConfigurationEditor).
Right click on the TesttoolConfigurationEditor.exe and select Properties as shown in screenshot below.
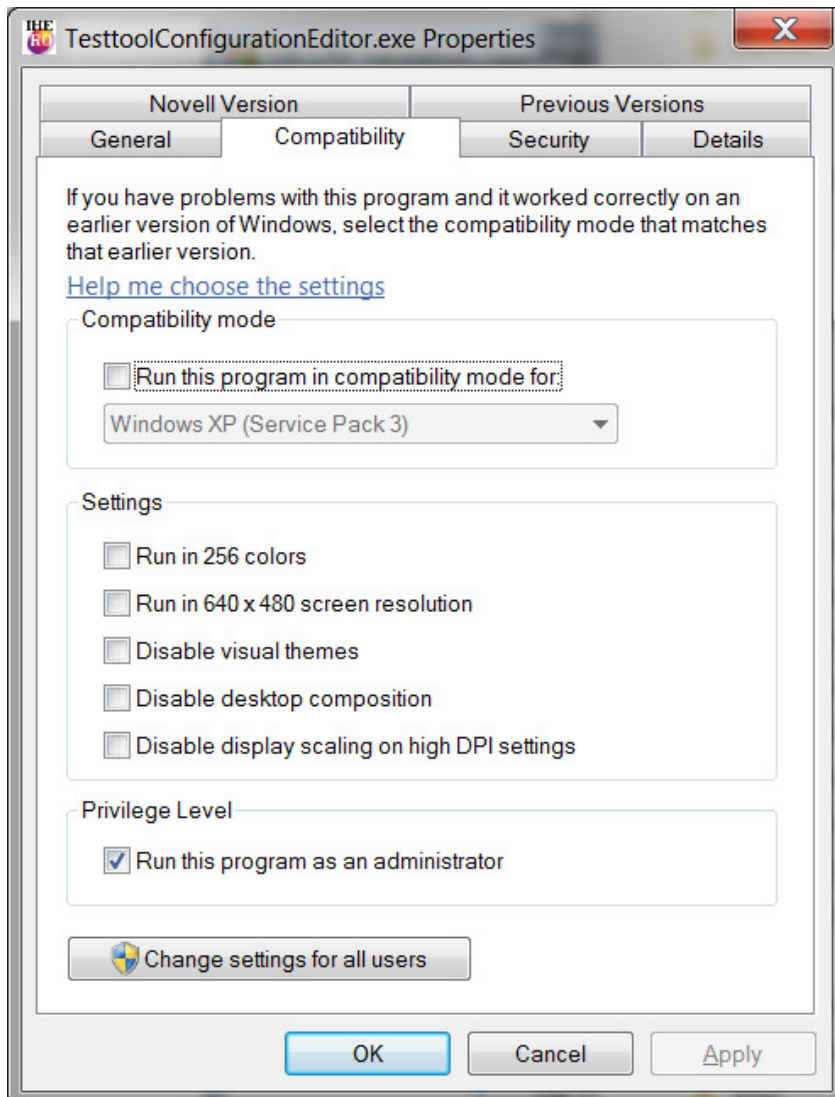
Check the Run this program as an administrator checkbox and press OK.

When the editor tool is started, the *"Application Entities"* tab is shown (see screenshot below). The AE titles, ports and IP Addresses of the various scenario actors (and dimse commands) can be configured. In chapter 2 is a list of actors and dimes commands for each scenario.

When a wrong format is typed in the fields the characters turn red and saving is not possible.

1.1 Configuring the test tool AE-titles and Ports

 The test tool is either simulating a TMS (Treatment Management System) or a TDD (Treatment Delivery Device). In some scenarios, when acting as a TMS it can also be acting as an OST. The test tool will use these settings to listen on a specific port. The OST is simulated as a different entity and should have a different AE title and portnumber; otherwise it is not possible to save the settings.

Test Tool As TDD or TMS

| AE Title | IHETESTTOOL |
| Port | 105 |

Test Tool As local OST

| AE Title | OST |
| Port | 106 |

1.2 Configuring the SUT AE-titles and Ports

 When the test tool is acting as a TDD it must know the parameters of the TMS and OST. During the scenarios the TDD will send C-STORE requests and C-MOVE requests to the OST. And it will also send a C-FIND request, C-MOVE request and N-SET and N-ACTION requests to the TMS. For both the OST as the TMS it could very well be that only one AE title and portnumber is needed, therefore it is possible to use the same settings for different dimse commands.
 When the test tool is acting as a TMS, it will most of the times react to incoming request. Except once, when it will receive a C-MOVE request from the TDD, it should know to which port number it should send the C-STORE requests.

SUT As TDD

IP Address	127.0.0.1

CSTORE

AE Title	IHETESTTOOL
Port	105

SUT As TMS

IP Address	127.0.0.1

CMOVE

AE Title	IHETESTTOOL
Port	105

CFIND

AE Title	SUT_AE
Port	105

UPS (N-ACTION, N-SET)

AE Title	SUT_AE
Port	105

SUT As OST

CMOVE

AE Title	OST_AE
Port	106

CSTORE

AE Title	OST_AE
Port	106

IP Address	127.0.0.1

2. Scenario settings

The test tool uses not all settings for every scenario, in the list below is clarified which settings of the SUT will be used.

TDD scenario's * Settings test tool: TMS, OST	SUT settings
(01) TDD retrieval of worklist	
(02) TDD Treatment Delivery Input Instances	TDD[C-STORE]
(03) TDD Deliver initialization	TDD[C-STORE]
(04a) TDD Deliver succes	TDD[C-STORE]
(04b) TDD Deliver cancel with radiation	TDD[C-STORE]

TMS scenario's * Settings test tool: TDD	SUT settings
(01) TMS retrieval of worklist	TMS[C-FIND]
(02) OST Treatment Delivery Input Instances	OST[C-MOVE]
(03) TMS Deliver initialization	TMS[UPS,C-MOVE]
(04a) TMS Deliver succes	TMS[UPS]
(04b) TMS Deliver cancel with radiation	TMS[UPS]

# 3. Adding or removing transfer syntaxes

It is possible to select transfer syntaxes for both sender and receiver.

Default transfer syntaxes for the sender:

- 1.2.840.10008.1.2.1 (Explicit VR Little Endian (ELE))
- 1.2.840.10008.1.2 (Implicit VR Little Endian: Default Transfer Syntax for DICOM (ILE))
- 1.2.840.10008.1.2.2 (Explicit VR Big Endian (EBE))

Default transfer syntaxes for the receiver:

- 1.2.840.10008.1.2.1 (Explicit VR Little Endian (ELE))
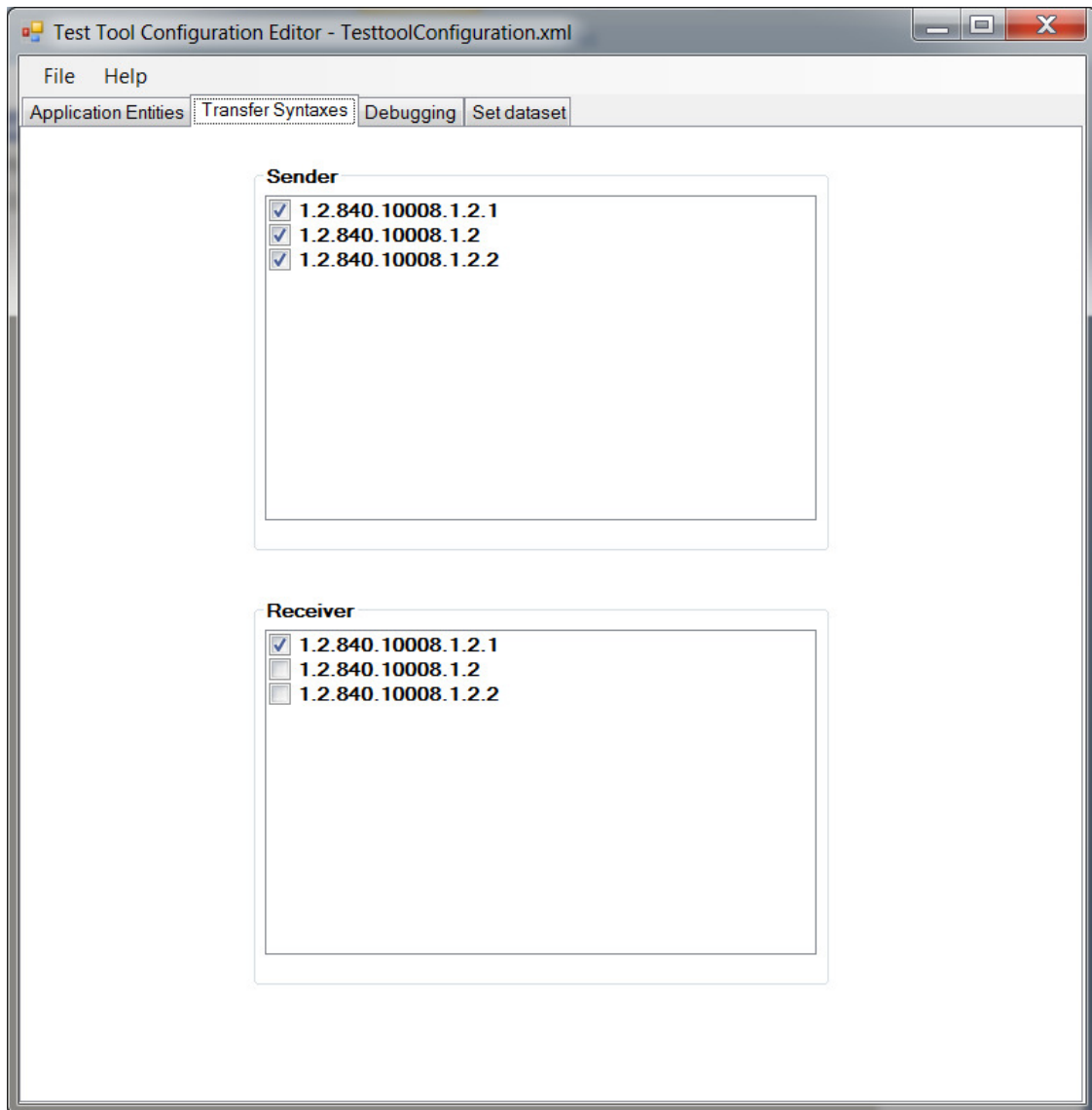
4. Debug settings

In this tab it is possible to enable/disable some debug settings:

- *"Report Debug messages"*: check to see debug messages in the DVT logging, uncheck to disable them

- *"Report TBD Rule"*: enable this to let all TBD rules report an error message when executed, uncheck to disable these messages.
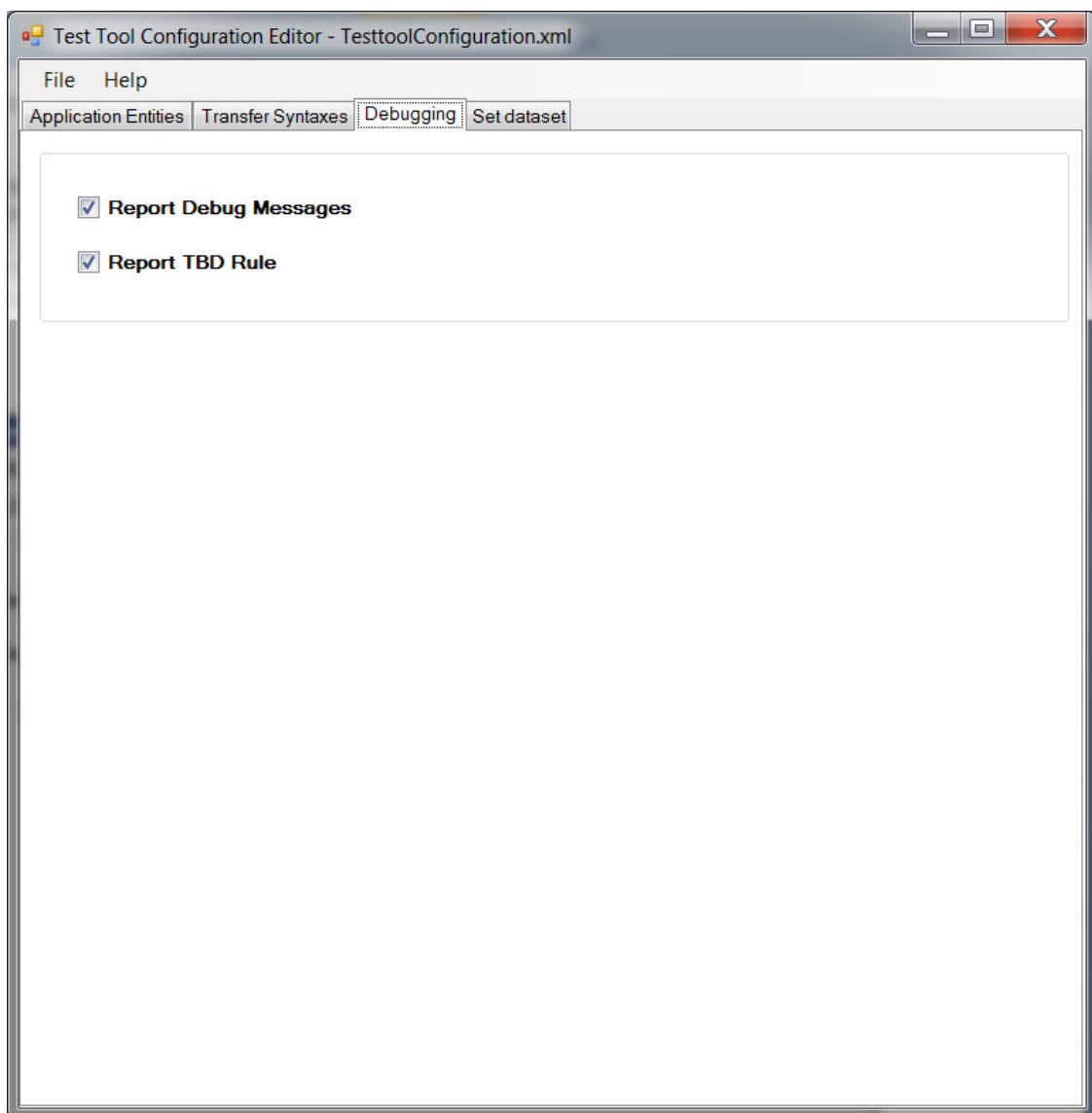
5. Set Dataset

With the Set dataset tab is it is easy to place your dataset files in the correct directories.
In the textbox type in the TDW-II directory where TDW testtool 2013 is installed.

Click the first required button and select all RT objects.
By the sesond required button select only the RT Beams treatment record.
Optional a set of CT Images can be set.

With the delete button all files in the dataset directories will be deleted.