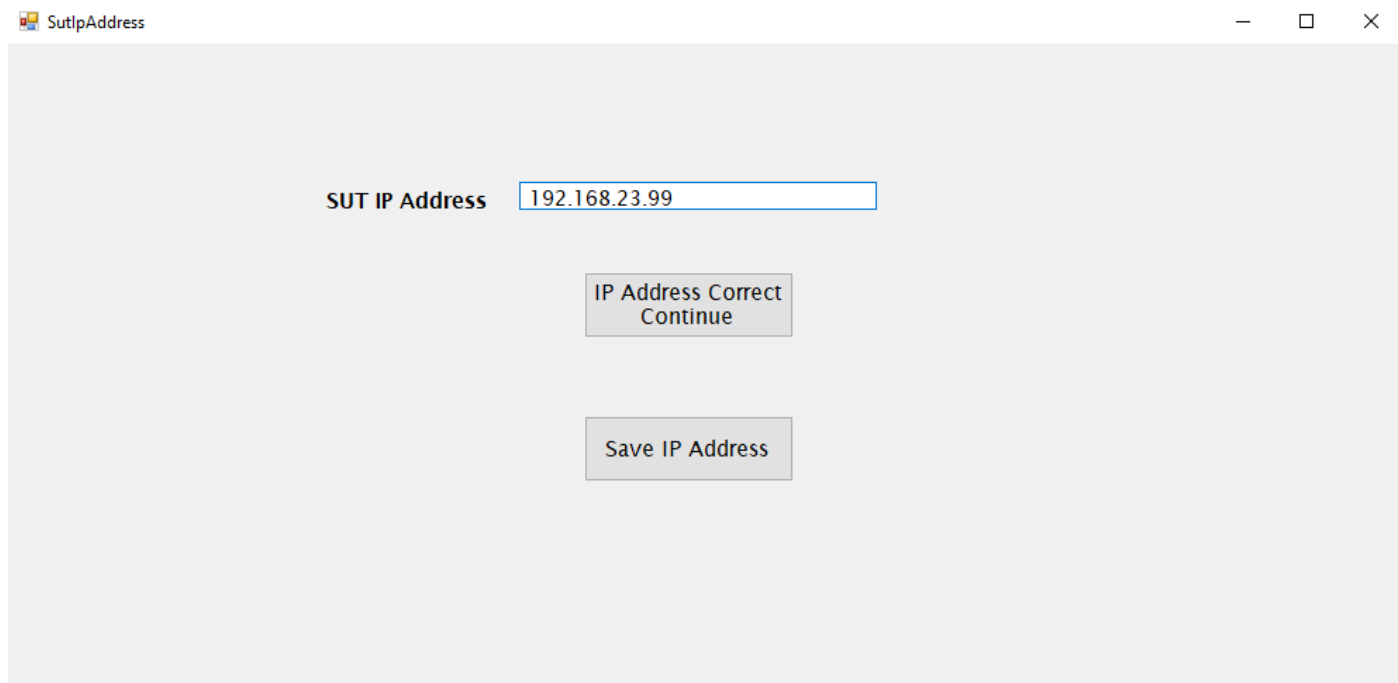The TCI Message Generator version 2 incorporates the changes listed in the Change Request branch of the TCI_ASN1 repository as well as a couple of more changes. Some of the 2945 messages have moved to the SUT Control tab. The SUT Control tab contains all the SUT Control messages in a single tab.

In the past, the TCI Message Generator expected you to have the SUT IP address in a file (*SutIPv4Address.txt*) located in *C:\Users\Public\Danlaw* directory. In this version, after the splash screen, you will be presented with a form for you to accept, modify or enter an IP address if it can't find the previously-mentioned file.

This form will look for the file *C:\Users\Public\Danlaw\ SutIPv4Address.txt*, if it does not find it, the *"SUT IP Address" textbox* will be empty for you to enter the IP address. After entering the IP address, click on the button *"Save IP Address" button*. This will save the IP address in *C:\Users\Public\Danlaw\ SutIPv4Address.txt*. If the directory *C:\Users\Public\Danlaw* did not exist, it will create it. Subsequent invocation of the software will then find the file and display its content.

If the file *C:\Users\Public\Danlaw\ SutIPv4Address.txt* is found, the software will read it and display its content in the *"SUT IP Address" textbox*. In this case, you have 2 choices, you can either click on *"IP Address Correct Continue" button* to accept the IP address value or you can edit or modify the content of the *"SUT IP Address" textbox*. If you modify the textbox, please click on *"Save IP Address" button* to save the new value.

In all cases, the software checks for a valid IP address in the *"SUT IP Address" Textbox*.

Figure 1. SUT IP Address Form

The other change was requested by Dmitri Khijniak during the Texas TAMU plugfest. It allows you to record a sequence of messages and then play them back.
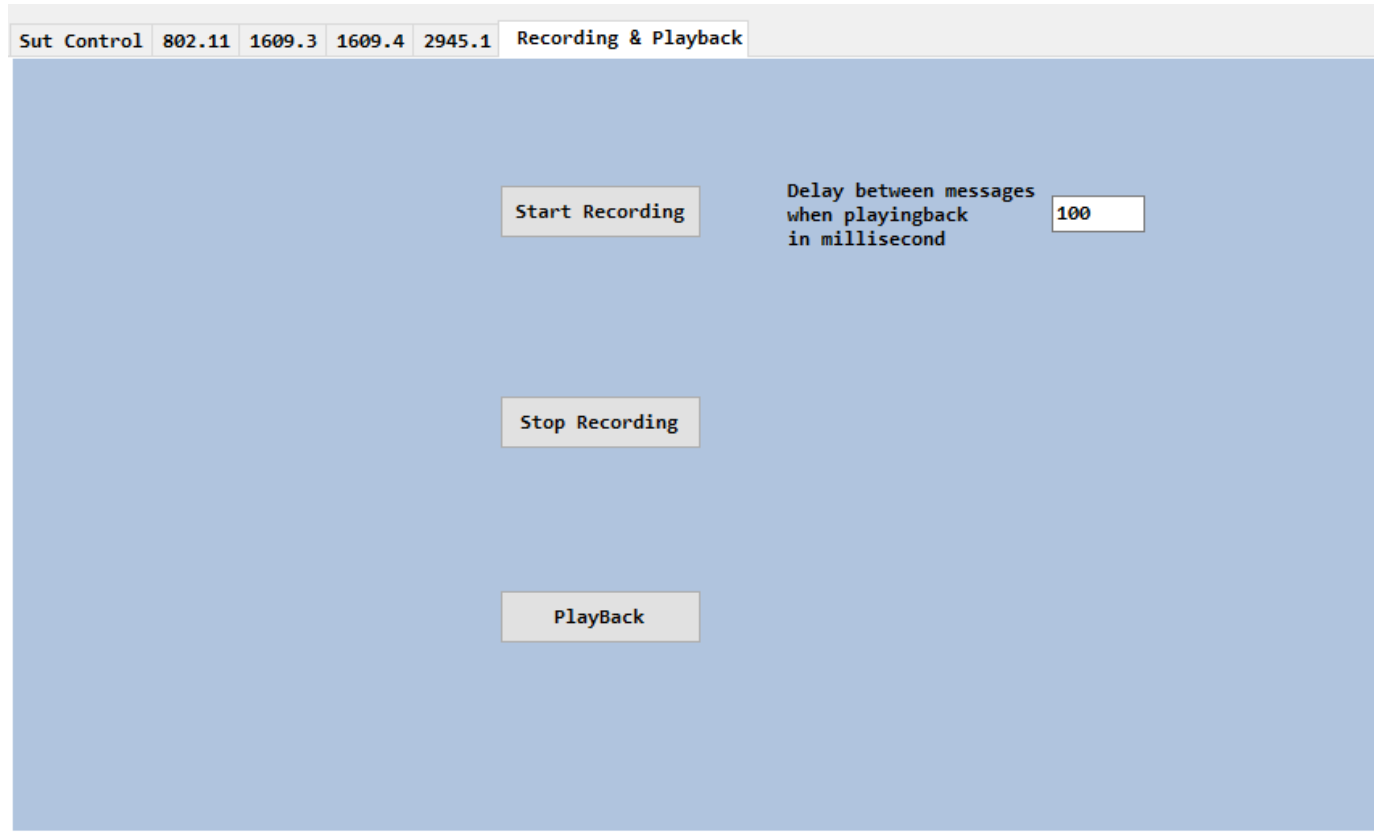

Figure 2. Record and Playback Tab

Click on the "start Recording" button. Make sure that the delay textbox has a valid delay number. Once you click on the "start Recording" button, the software will keep track and accumulate all the transmitted messages to the SUT.

Clicking on the "stop Recording" button will write all the messages to a CSV file in the **C:\Users\Public\Danlaw\ directory** . The file name starts with "TciMsgUdpPackets-"followed by the creation date in this format yyyy-MMMM-dd-HH-mm-ss.

Here is an example of the file name: TciMsgUdpPackets-2018-November-03-21-25-17.csv

The CSV contains 4 entries per message, they are:

- Message Id;
- The UDP hex value;
- The message description;
- The time delay Between messages;

The only important fields for playback are the UDP Hex values and the time delay between messages. Unfortunately, the software cannot have different time delays between different messages and must create a fixed time delay for all its messages in its CSV file.

If you want different time delays between messages when you play back, you can edit the CSV file. The other 2 fields in the CSV, the message Id and message description, can guide to the type of message transmitted and you can change the time delay between messages accordingly.

Here is a look at the content of the CSV file:

A	B	C	D	E
1	1 0x00 0x01 0x00 0x00 0x01 0x66 0xdc 0x52 0xca 0xc1 0x86 0x80 0x00 0x01 0x01 0xff	shut SUT Down	100	
2	2 0x00 0x01 0x00 0x00 0x01 0x66 0xdc 0x52 0xcd 0x90 0x86 0x80 0x00 0x02 0x01 0xff	Restart SUT	100	
3	3 0x00 0x01 0x00 0x00 0x01 0x66 0xdc 0x52 0xcf 0xe0 0x86 0x80 0x00 0x03 0x01 0xff	check Sut Readiness	100	
4	4 0x00 0x01 0x00 0x00 0x01 0x66 0xdc 0x52 0xd3 0x79 0x86 0x80 0x00 0x04 0x01 0xff	requestSutInfo	100	
5	5 0x00 0x01 0x00 0x00 0x01 0x66 0xdc 0x52 0xe9 0xd9 0x86 0x80 0x00 0x05 0x05 0x04 0x38 0x39 0x30 0x37	setTestId	100	
6				

Figure 3. CSV File Content

Clicking on the Playback button, you will be presented with a dialog form for you to choose the CSV file that you want to playback. Change the directory in the dialog form to *C:\Users\Public\Danlaw* to be able to see the prerecorded files. Once you select a file to playback, the software will send the UDP messages to the SUT one after another after the time delay specified in the CSV file.

The messages will also be printed in the status textbox as if you sent them manually.

The new software will be installed in a new directory, C:\Program Files\Danlaw\TCI_Msg_Generator V2\
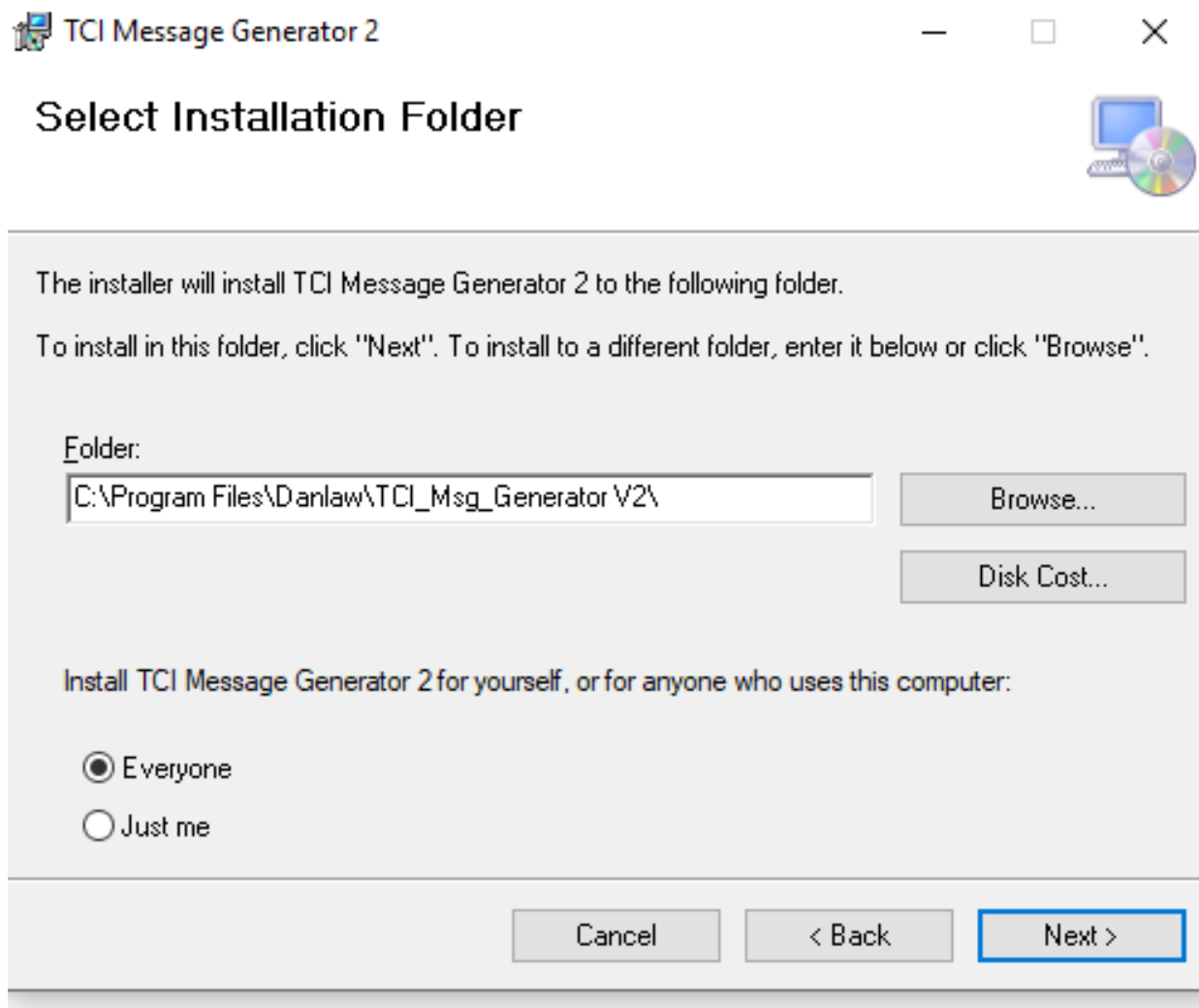

Figure 4. Installation Directory

Note: Trust you find this to your satisfaction and you find it useful, I have not tested this thoroughly as I am very busy with other things, but if you discover a bug, please send me an e-mail @ mostafak@danlawinc.com. Also, if you want a new feature to this software, please let me know and I will try to implement it (time permitting). We aim to please 😊.