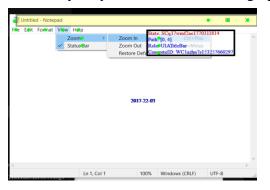
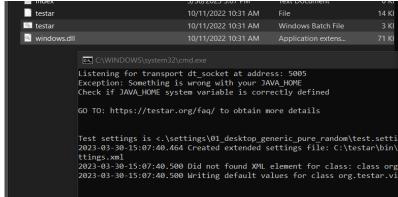
Paper name: Testar – scriptless testing through graphical user interface

Paper DOI: <a href="https://doi.org/10.1002/stvr.1771">https://doi.org/10.1002/stvr.1771</a>

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Testar has a dedicated website with a tab for downloading the tool. There you can also find a DIY hands on manuals where the installation steps are described. The installation process was fairly easy and intuitive and the graphical interface of the tool is pretty intuitive.



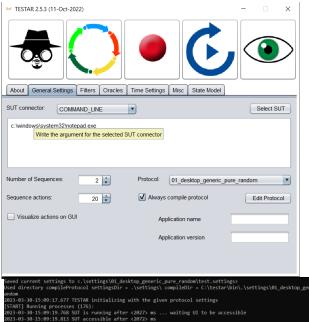


Testar in SPY mode in notepad

The tool is installed in the C directory where it can be run from a windows batch file. The JAVA\_HOME exception was fixed afterwards. As shown in GUI, Testar has several execution modes, in order: SPY, GENERATE, RECORD, REPLAY, VIEW.

We begin with SPY mode which allows us to inspect the widget controls of the GUI. Here we see what actions TESTAR is able to extract and choose from. We configured the SUT connector to open

the Notepad application.



Then, the automated testing is performed using the GENERATE mode. It includes a random selection of actions whose purpose is the violation of general-purpose system requirements. (the system under use should not crash, freeze, there shouldn't be any widgets titled error, problem etc).

The results of the tests are displayed in an output directory where HTML reports as well as Text reports.

The main benefits of the tool consist of the scriptless testing it offers and how easy it is to automatically test almost every app with a GUI.

```
2023-03-30_15h09m50s_notepad_sequence_1 - Notepad
File Edit Format View Help
Starting sequence 1 (output as: ./output\2023-03-30 15h09m50s notepad\se ^
ExecutedAction [1]:
 @Action ConcreteID = ACd79u50803169188057 AbstractID = AAd79u5080316918
 ConcreteID CUSTOM = ACC18w58e5813170193709 AbstractID CUSTOM = AACs8b1x
 @State ConcreteID = SC7ny0ly2251110252236 AbstractID = SR1mpvkz62082174
 ConcreteID CUSTOM = SCClkzr3g25d1030760569 AbstractID CUSTOM = SACvk4iy
        ROLF = LeftClickAt
                 WIDGET = WCdfgprn1c4116076503, WR17v7k2nb1067391859, WT1
                 ROLE = UIAMenuItem
                 TITLE = Edit
SHAPE = Rect [x:1207.0 y:227.0 w:40.0 h:24.0]
                 CHILDREN = 0
        PATH = [0, 3, 1]
DESCRIPTION = Left Click at 'Edit'
        TEXT = Compound Action =
                 Move mouse to (1227.0. 239.0)
                                        100% Unix (LF)
                     Ln 1, Col 1
```