

# Automation Testing Tool

## **User Manual**

A step-by-step guide

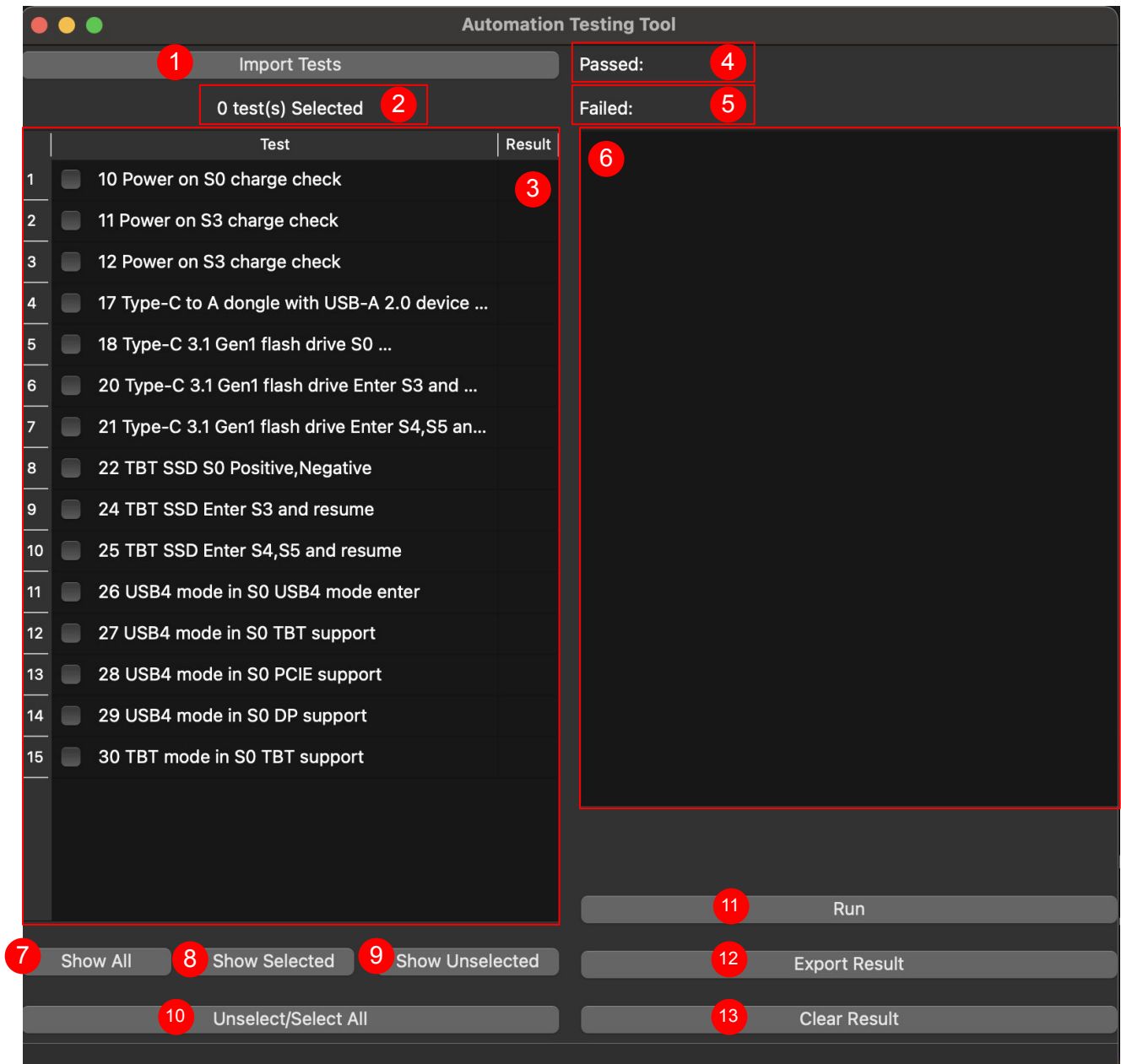
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# Introduction

This user manual has been meticulously crafted to guide you through the features and functionalities of our automation testing tool. Whether you are a seasoned quality assurance professional or a newcomer to the world of testing, this tool is designed to streamline your testing processes, enhance efficiency, and elevate the overall quality of your software and hardware. In this manual, you will find step-by-step instructions to help you harness the full potential of this tool. From test script creation to execution, results analysis, and beyond, we are committed to providing you with a seamless testing experience.

# User Interface Overview



Layout contents
1. Import Tests Button
2. Selected Test Cases Counter
3. Test Case Table
4. Passed Test Cases Counter
5. Failed Test Cases Counter
6. Result Console
7. Show All Button
8. Show Selected Button
9. Show Unselected Button
10. Unselect/Select All Button
11. Run Button
12. Export Result Button
13. Clear Result Button

# Instructions

## *Test Case Writing Format*

Accepted file formats: TXT File (\*.txt), PYTHON File (\*.py)

Single Test Case Structure:

1. Case ID (must be unique)
2. Case name
3. Test case starting keyword
4. Testing code
5. Test case ending keyword

Rules:

1. **All modules** should be imported on **top** of the code.
2. Import **one package per line** in the code only.  
  
e.g. import numpy, pandas (not allowed).
3. **Avoid** incorporating the following **keywords** into the code unless indicating the structure of a test case: CaseID, CaseName, start, end, import.
4. All print statements from custom packages should have flush option set to **True** to enable live update on the console (**not needed for test cases**).  
  
e.g. print("Hello World!", flush = True).
5. **Report** a passed test case by printing **PASS** to the console, otherwise the result will be diagnosed as FAIL.

# Instructions

## *Test Case Writing Format*

The following sample demonstrates the structure of a standard file that contains multiple test cases.

Test Cases File Sample:

```
import numpy  
import pandas
```

```
# CaseID=A001  
# CaseName=WinUSBReboot  
# start  
for i in range(2):  
    print("Reboot")  
print("PASS") # Test case passed  
# end
```

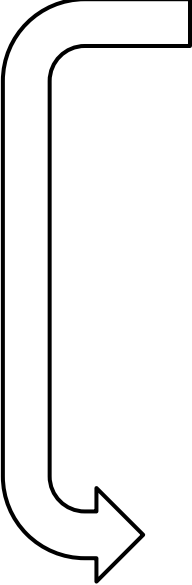
```
# CaseID=A002  
# CaseName=WinUSBHibernate  
# start  
for i in range(2):  
    print("Hibernate")  
print("FAIL") # With or without this, the test case failed  
# end
```

# Instructions

## *Custom Modules Usage*

1. Move all custom modules under the env folder (no need to change import paths inside the test case file)
2. Move the test case file into the PWD of the tool

Figure: Sample Folder



Name	Date Modified	Size	Kind
my_module.py	Today at 14:06	40 bytes	Python script
my_modules	Today at 14:45	--	Folder
sample_testing_script.py	Today at 14:27	3 KB	Python script

Name	Date Modified	Size	Kind
__pycache__	13:57	--	Folder
constants	14:30	--	Folder
env	14:46	--	Folder
__init__.py	13:26	Zero bytes	Python script
__pycache__	14:19	--	Folder
modules.py	14:30	84 bytes	Python script
my_module.py	14:06	40 bytes	Python script
my_modules	14:46	--	Folder
log	14:41	--	Folder
main.py	14:20	14 KB	Python script
main.ui	2023/12/22	4 KB	Qt Desi...cument
object	11:23	--	Folder
sample_testing_script.py	14:27	3 KB	Python script



# Instructions

## *Import Tests*

1. Click Import Tests Button
2. Select a file that contains test cases
3. Open the file
4. Verify that the test cases are correctly imported into the Test Case Table

Note: Import tests override tests in the Test Case Table from last import

Figure: Empty Test Table

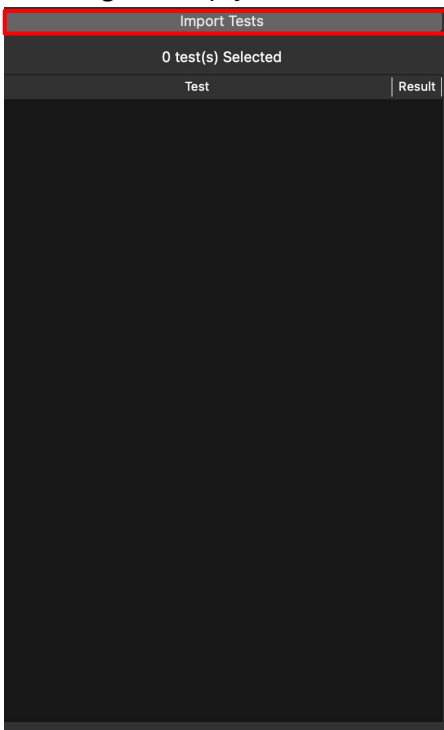


Figure: Imported test cases

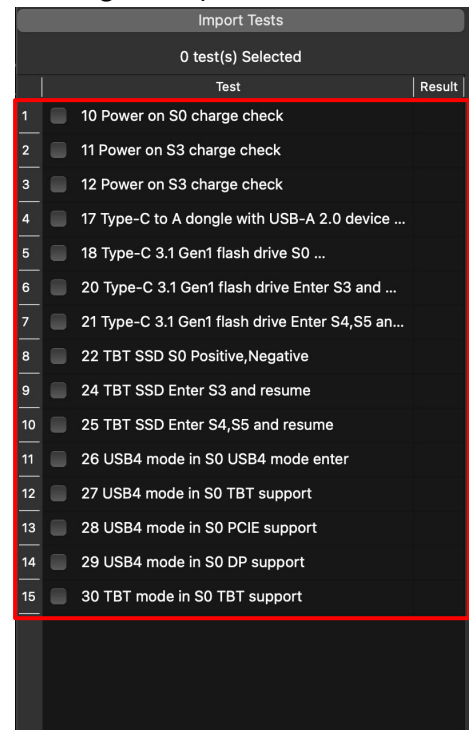
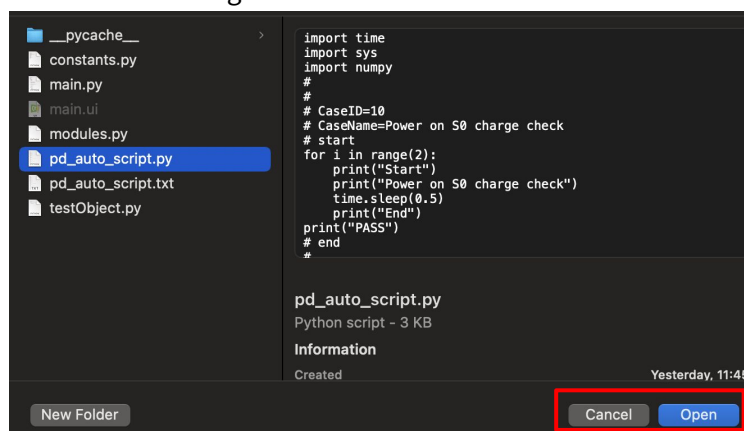


Figure: Test cases file selection



# Instructions

## User View Options

- 1. Import tests
- 2. Select test cases from the Test Case Table
- 3. Click Show All/Selected/Unselected Button
- 4. View Test Case Table

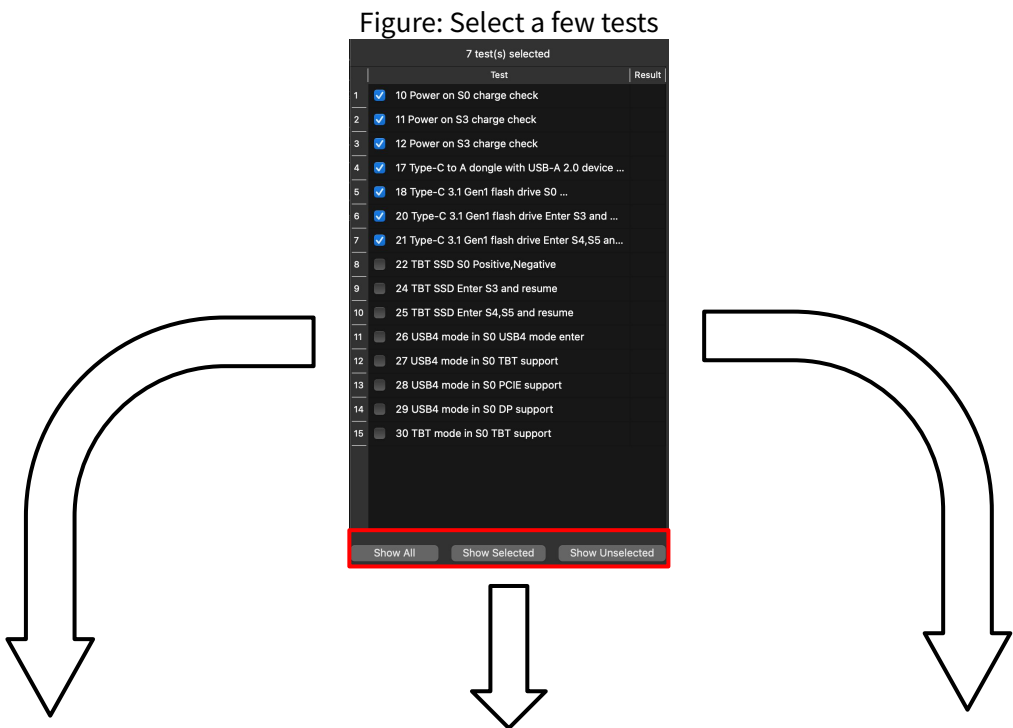


Figure: Show All Option

	Test	Result
1	<input checked="" type="checkbox"/> 10 Power on S0 charge check	
2	<input checked="" type="checkbox"/> 11 Power on S3 charge check	
3	<input checked="" type="checkbox"/> 12 Power on S3 charge check	
4	<input checked="" type="checkbox"/> 17 Type-C to A dongle with USB-A 2.0 device ...	
5	<input checked="" type="checkbox"/> 18 Type-C 3.1 Gen1 flash drive S0 ...	
6	<input checked="" type="checkbox"/> 20 Type-C 3.1 Gen1 flash drive Enter S3 and ...	
7	<input checked="" type="checkbox"/> 21 Type-C 3.1 Gen1 flash drive Enter S4,S5 an...	
8	<input type="checkbox"/> 22 TBT SSD S0 Positive,Negative	
9	<input type="checkbox"/> 24 TBT SSD Enter S3 and resume	
10	<input type="checkbox"/> 25 TBT SSD Enter S4,S5 and resume	
11	<input type="checkbox"/> 26 USB4 mode in S0 USB4 mode enter	
12	<input type="checkbox"/> 27 USB4 mode in S0 TBT support	
13	<input type="checkbox"/> 28 USB4 mode in S0 PCIE support	
14	<input type="checkbox"/> 29 USB4 mode in S0 DP support	
15	<input type="checkbox"/> 30 TBT mode in S0 TBT support	

Figure: Show Selected Option

	Test	Result
1	<input checked="" type="checkbox"/> 10 Power on S0 charge check	
2	<input checked="" type="checkbox"/> 11 Power on S3 charge check	
3	<input checked="" type="checkbox"/> 12 Power on S3 charge check	
4	<input checked="" type="checkbox"/> 17 Type-C to A dongle with USB-A 2.0 device ...	
5	<input checked="" type="checkbox"/> 18 Type-C 3.1 Gen1 flash drive S0 ...	
6	<input checked="" type="checkbox"/> 20 Type-C 3.1 Gen1 flash drive Enter S3 and ...	
7	<input checked="" type="checkbox"/> 21 Type-C 3.1 Gen1 flash drive Enter S4,S5 and...	

Figure: Show Unselected Option

	Test	Result
8	<input type="checkbox"/> 22 TBT SSD S0 Positive,Negative	
9	<input type="checkbox"/> 24 TBT SSD Enter S3 and resume	
10	<input type="checkbox"/> 25 TBT SSD Enter S4,S5 and resume	
11	<input type="checkbox"/> 26 USB4 mode in S0 USB4 mode enter	
12	<input type="checkbox"/> 27 USB4 mode in S0 TBT support	
13	<input type="checkbox"/> 28 USB4 mode in S0 PCIE support	
14	<input type="checkbox"/> 29 USB4 mode in S0 DP support	
15	<input type="checkbox"/> 30 TBT mode in S0 TBT support	

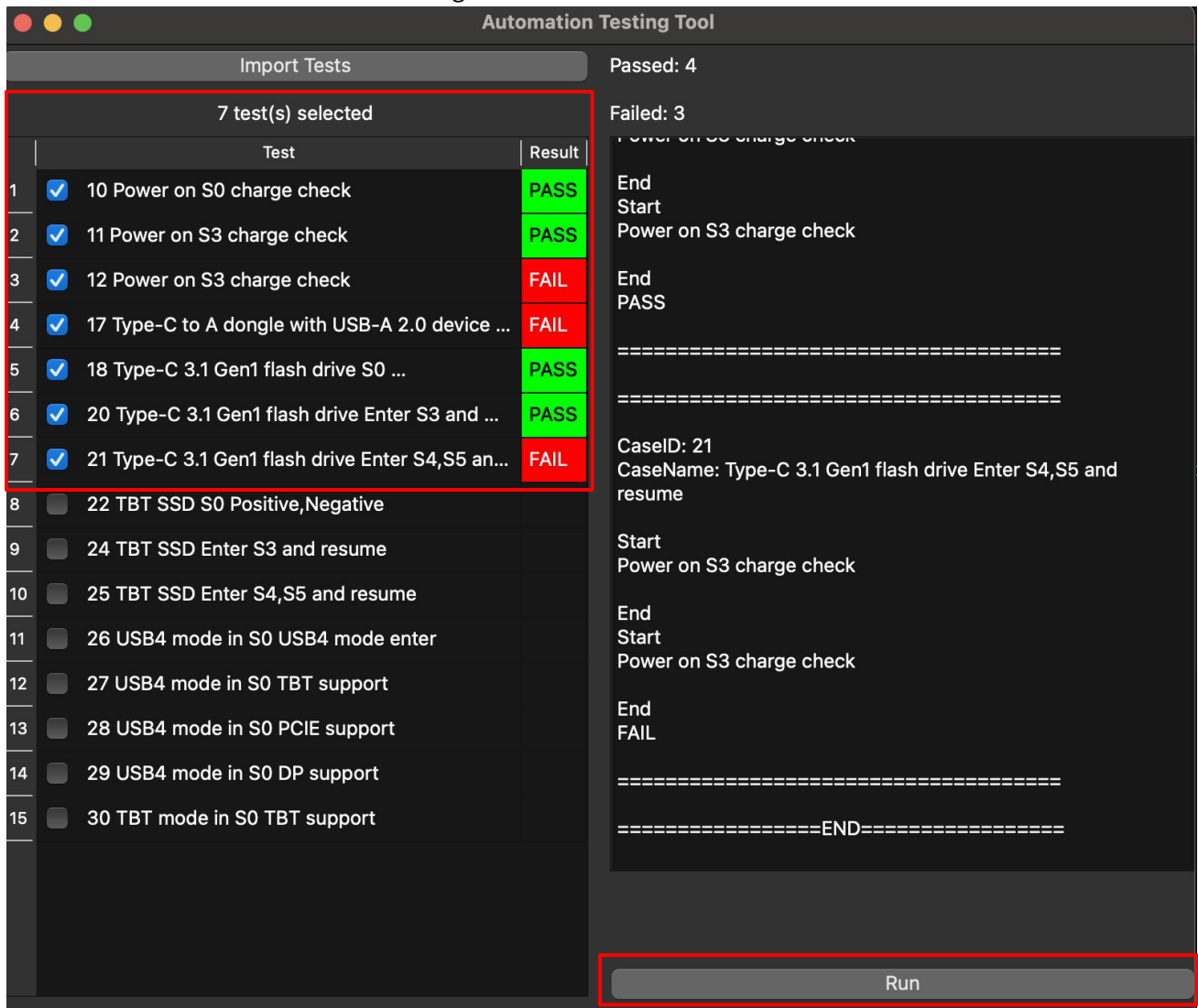
# Instructions

## *Run Tests*

1. Import tests from a file
2. Select test cases from the Test Case Table
3. Click Run Button
4. View printed progress and result on the Result Console and Test Case Table

Note: Run tests automatically clears the result before running cases

Figure: Run selected test cases



# Instructions

## *Export Result*

- 1. Import tests
- 2. Run tests
- 3. Click Export Result Button
- 4. Check if the result is correctly logged inside the log folder

Figure: Result obtained after running test cases

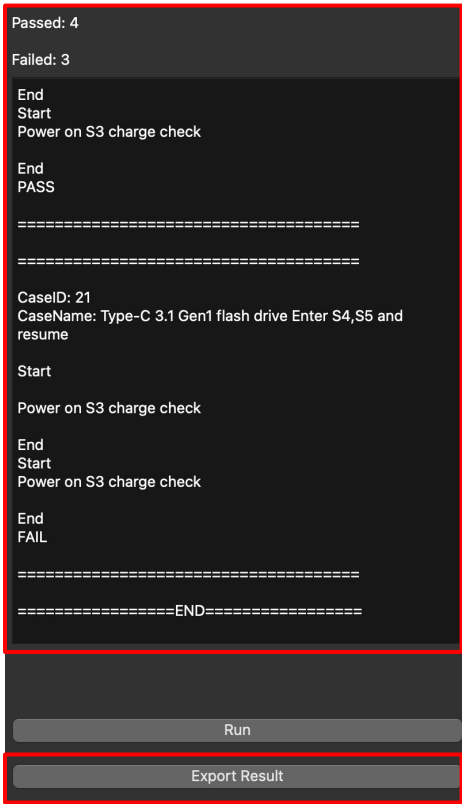


Figure: Result is correctly logged inside the log folder

log	11:38	--	Folder
result-03-07-2021, 18/51/12	11:37	647 bytes	Document
result-26-12-2023, 11/38/21	11:38	444 bytes	Document
result-26-12-2023, 11/38/24	11:38	444 bytes	Document

# Instructions

## *Clear Result*

1. Import tests
2. Run tests
3. Click Clear Result Button
4. Ensure that result has been removed from Result Console and Test Table

Figure: Run selected test cases

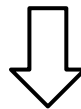
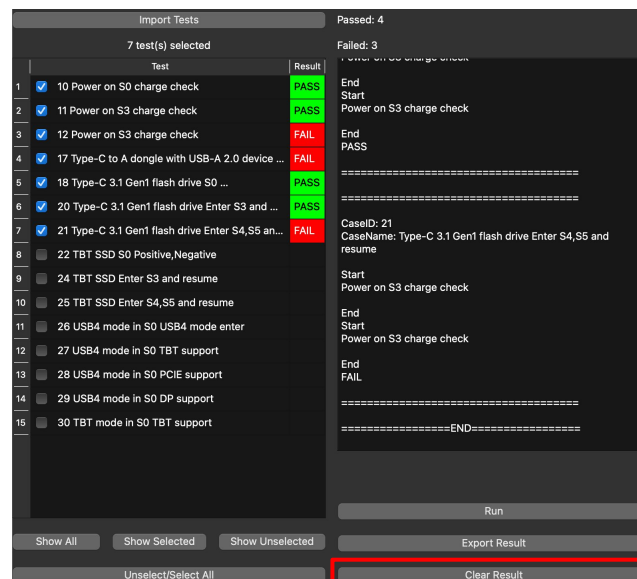


Figure: Result cleared

