Multifunction Analyzer

Tutorial for Auto Report Generator

Sohwa & Sophia Technologies

Version 1.00

Contents

01. Introduction

This document describes the flow of how to operate the **Auto Report Generator function** that is implemented in the **Multifunction Analyzer** [the abbreviated title is **MFA**].

If you have any words you don't know, such as name, please refer to the **Hardware Users Manual** for **MFA** and the **Help** for the **MFA application**.

Auto report generator

- **Functions**
- Oscilloscope
- Logic analyzer
- Pattern generator
- Function generator
- Digital multi meter
- Simple DC supply
- JTAG checker

02. Equipments

Please prepare the following equipments.

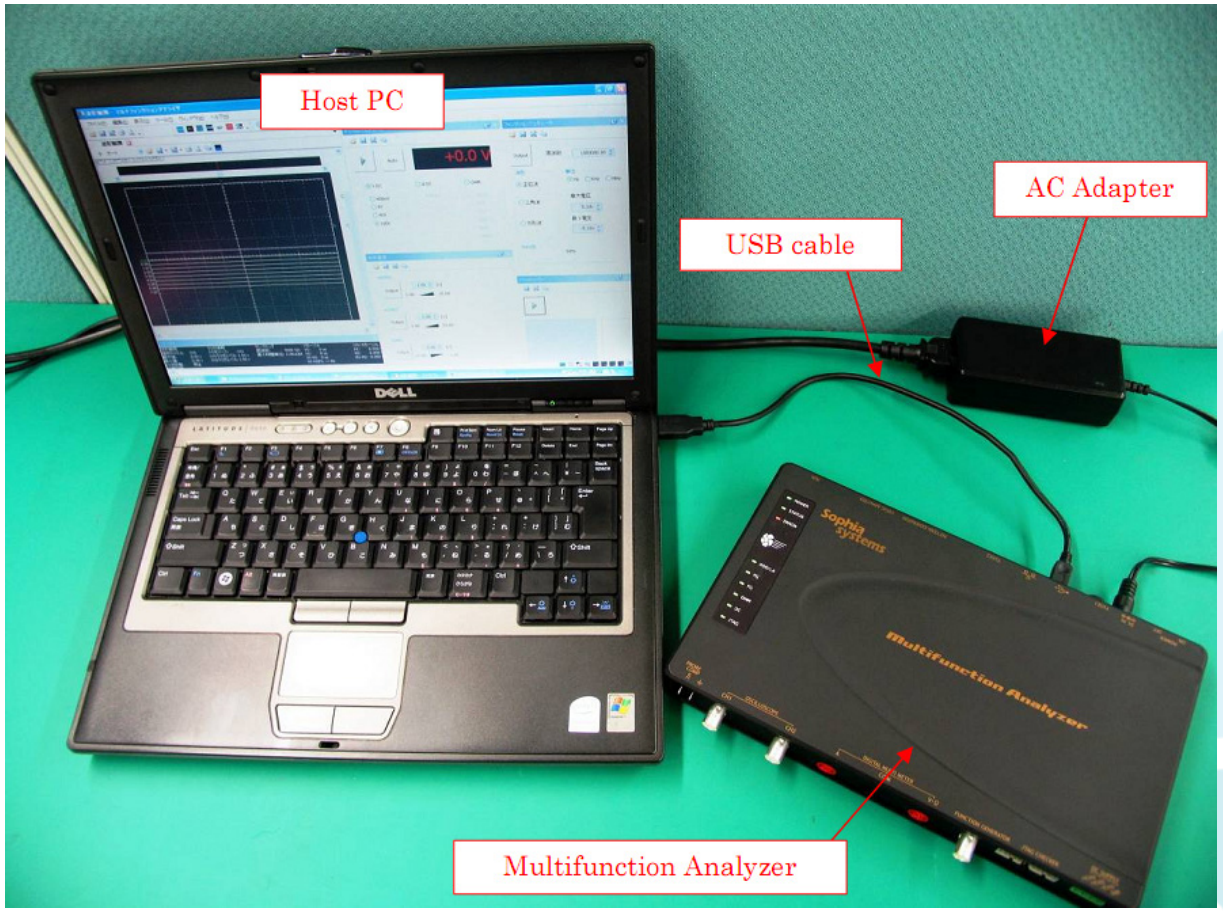
- **MFA** [Qty:1]
- **USB cable of type mini B** [Qty:1] [Sold separately]
- **AC adapter and AC cable** [Qty:1]
- **DSO probe** [Qty:1]
  [Sold separately: CS2891 [HP-9250 Maker: Misumi]
- **PC** [with the **MFA application**] [Qty:1]

*Please refer to the **Installation Manual** for how to install of **MFA application**.

03. Starting Up

Connect the **Host PC** and the **MFA's equipments**.

Then, turn on power to the **MFA** and start the **MFA application**.



* For details about how to connect the **Host PC**, the **MFA's equipments** and about how to start the **MFA**, please refer to the **Hardware Users Manual**.

* For details about how to start the **MFA application**, please refer to the **Help**.

04. Connections

In this section, describes connections for performing **DSO measurement**.

1. Set the **DSO probe** to **x10** .

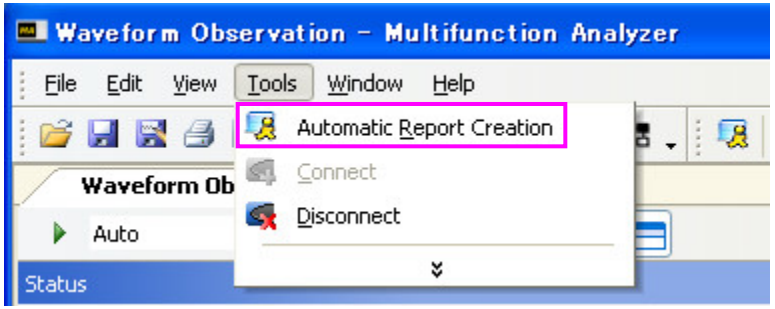
2. Connect the **DSO probe** to the **DSO CH1 connector**.
3. Connect the **DSO probe GND** to the **MFA PROBE GND connector**.
4. Connect the **DSO probe Signal** to the **MFA PROBE COMP connector**.

05. Start the Setup Dialog

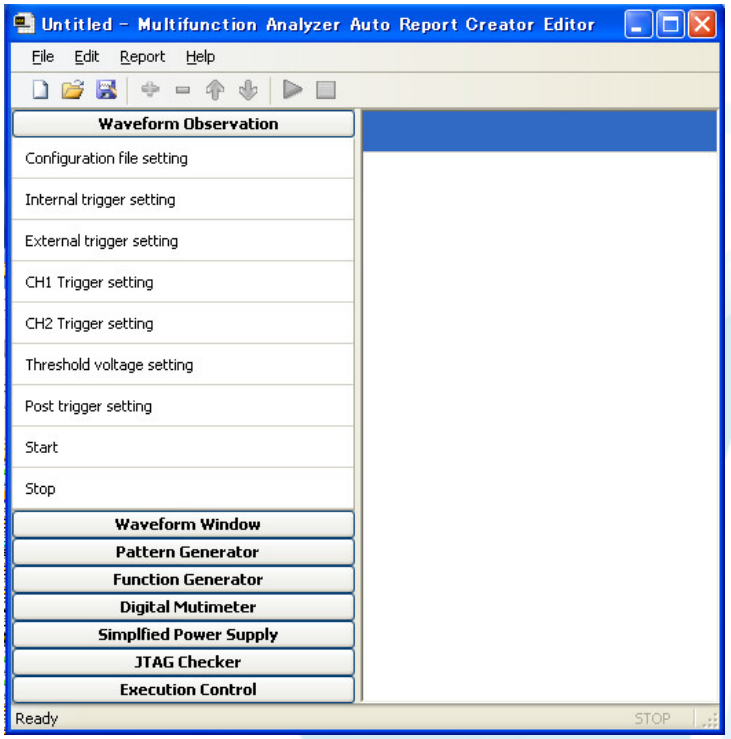
In this section, describes how to start the **Auto Report Creator Editor** of the **MFA application.**

Click **Automatic Report Creation** .

Click Automatic Report Creation



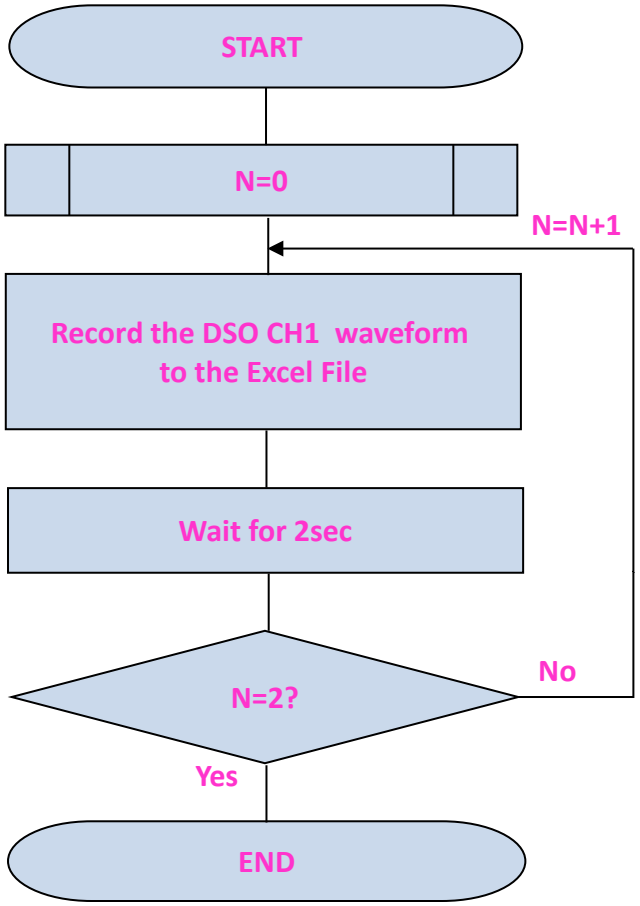
Auto Report Creator Editor



06. Automatic Execution Flow

In this section, describes automatic execution flow for recording to the **Auto Report**.

In the flow shown in the figure below, record the **DSO CH1 waveform** to the **Excel file**. It's done a total of **three times** at **2-second intervals**.

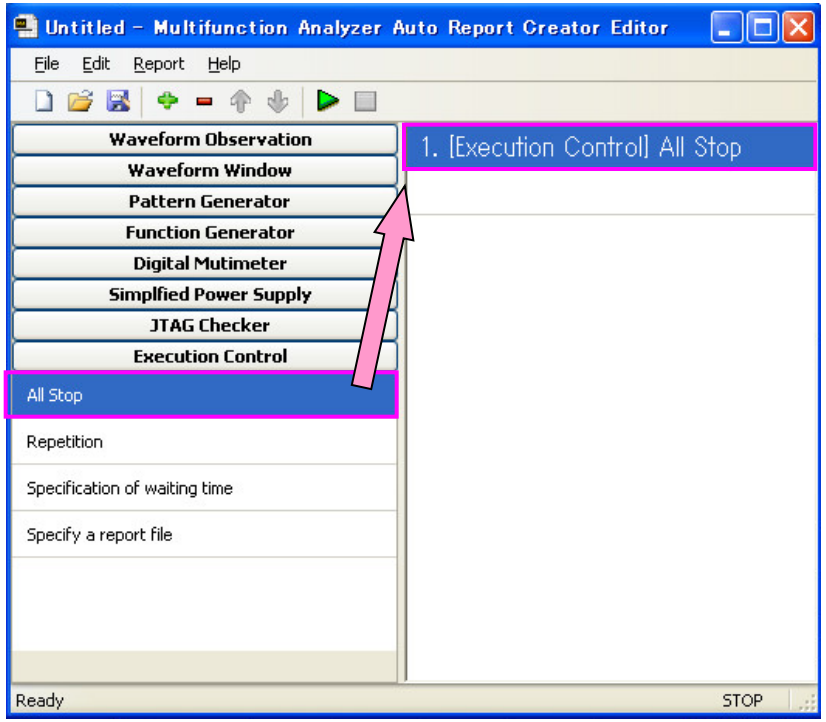


07. Setting the Flow 1

In this section, describes how to set the **flow**. The contents of the setting is the **All Stop** of the **Execution Control**.

1. To set the **flow** can be carried out by drag and drop.
2. As the setting for the beginning, then let all the stop function of the **MFA**.
3. Set **All Stop**.

Setting **All Stop**

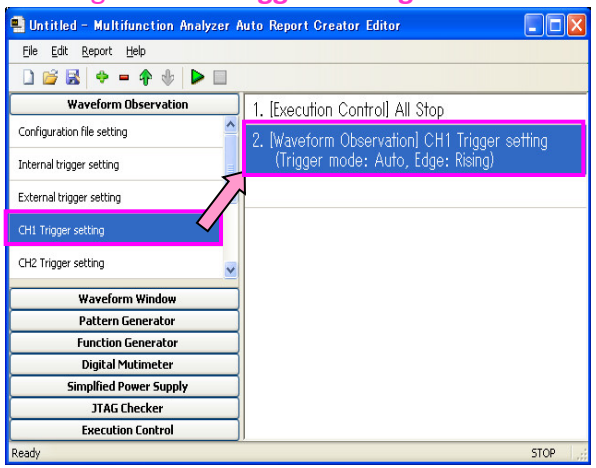


08. Setting the Flow 2

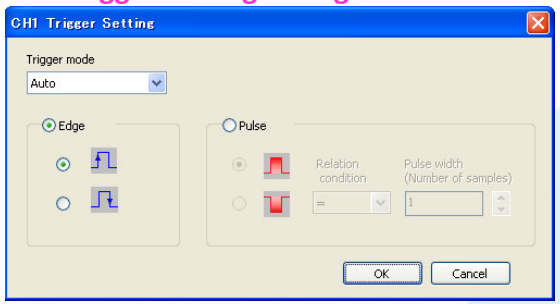
In this section, describes how to set the **flow**. The contents of the setting is the **CH1 Trigger setting** of the **Waveform Observation**.

1. When set up the **CH1 trigger setting**, the dialog starts.
2. Set the **Auto mode** and the **rising edge**.
3. When click the **OK button** of the **CH1 Trigger Setting Dialog**, the setting is complete.

Setting the **CH1 Trigger setting**



CH1 Trigger Setting Dialog

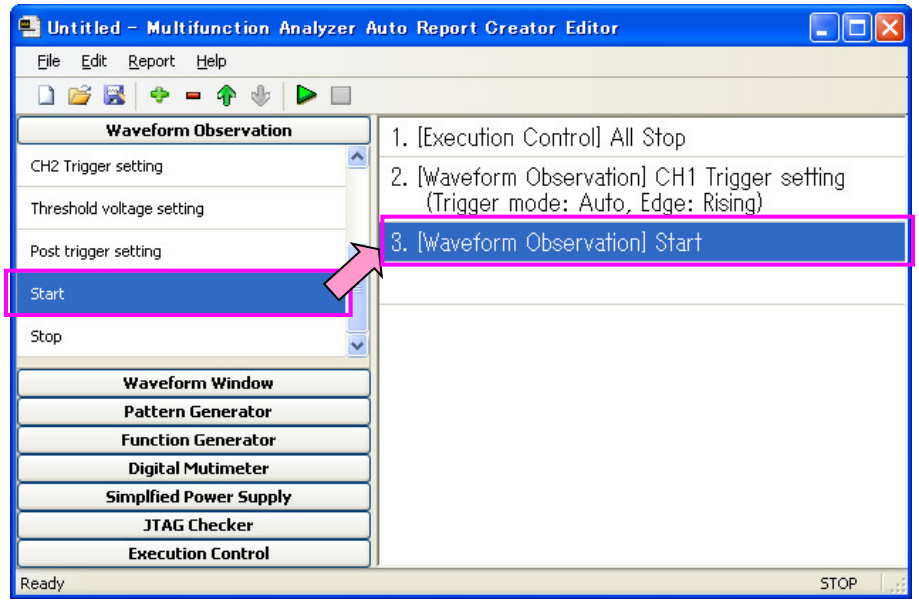


09. Setting the Flow 3

In this section, describes how to set the **flow**. The contents of the setting is the **Start** of the **Waveform Observation**.

Set the **Start**.

Setting the **Start**

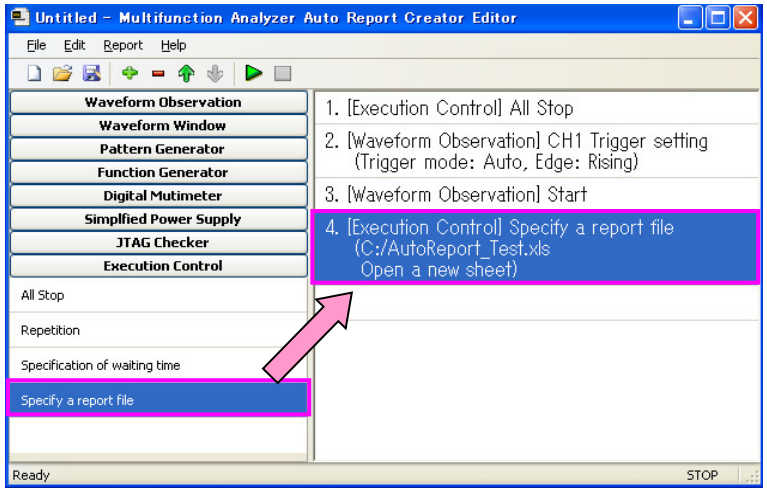


10. Setting the Flow 4

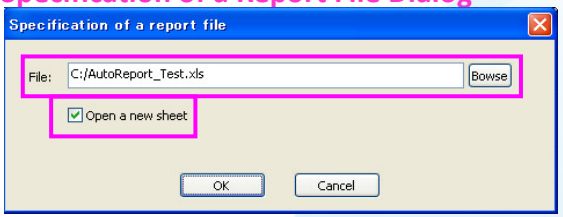
In this section, describes how to set the **flow**. The contents of the setting is the **Specify a report file** of the **Execution Control**.

1. When set up the **Specify a report file**, the dialog starts.
2. Click **Open a new sheet**, Set the **Excel file's name** and the **saving folder**.
3. When click the **OK button** of the **Specification of a Report File Dialog**, the setting is complete.

Setting the **Specify a report file**



Specification of a Report File Dialog

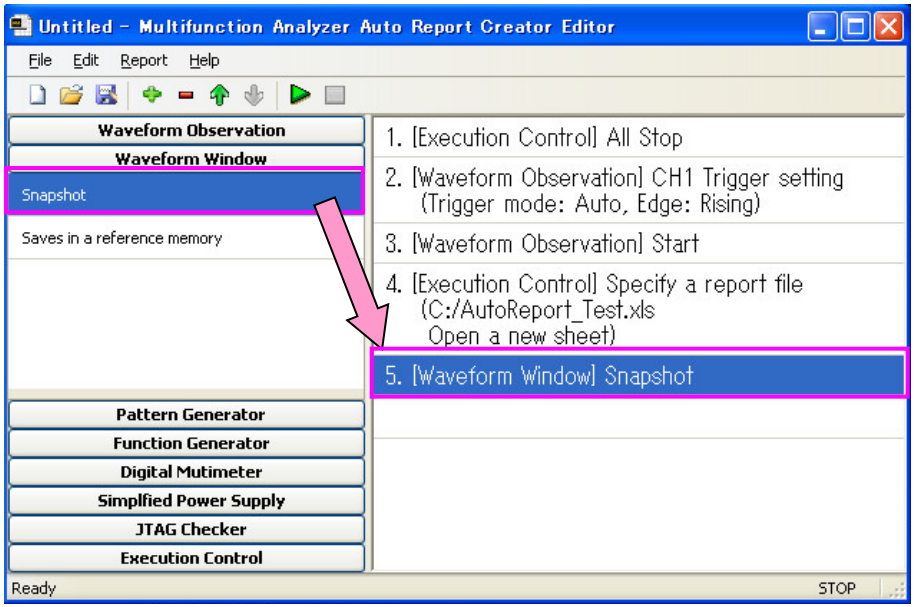


11. Setting the Flow 5

In this section, describes how to set the **flow**. The contents of the setting is the **Snapshot** of the **Waveform Window**.

Set the **Snapshot**.

Setting **the Snapshot**

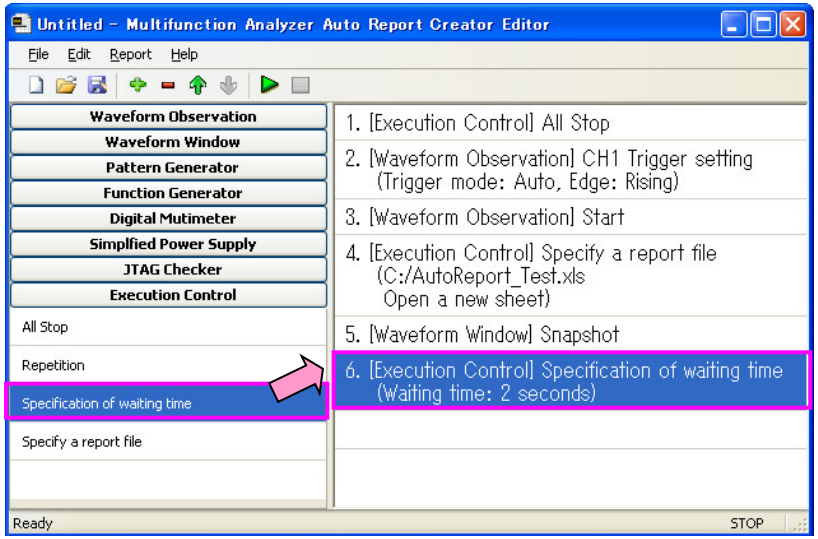


12. Setting the Flow 6

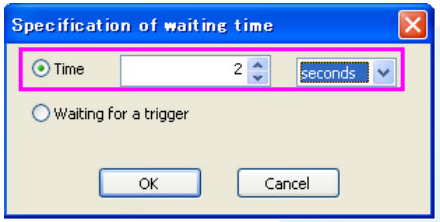
In this section, describes how to set the **flow**. The contents of the setting is the **Specification of waiting time** of the **Execution Control**.

1. When set up the **Specification of waiting time**, the dialog starts.
2. Set **2 seconds.**
3. When click the **OK button** of the **Specification of Waiting Time Dialog**, the setting is complete.

Setting the **Specification of waiting time**



Specification of Waiting Time Dialog

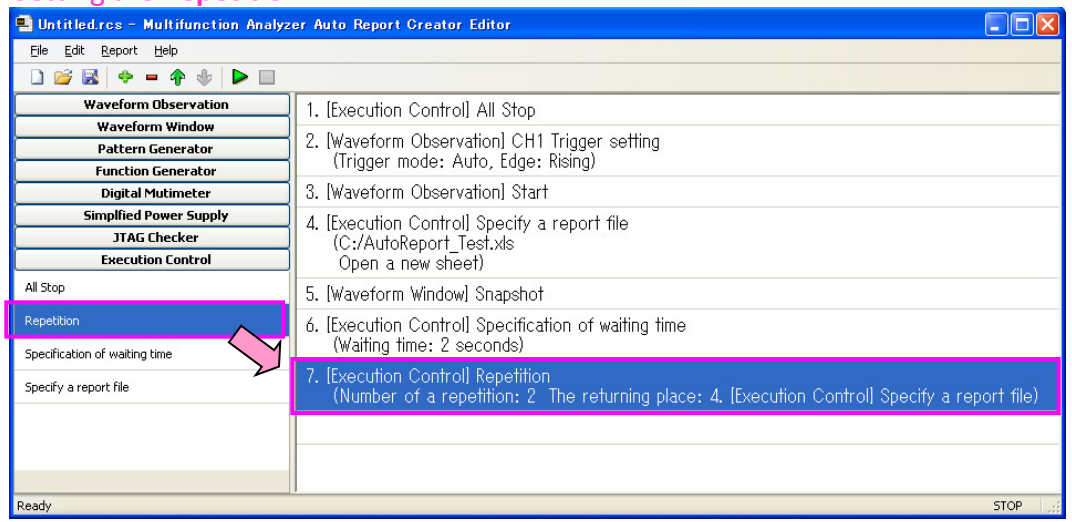


13. Setting the Flow 7

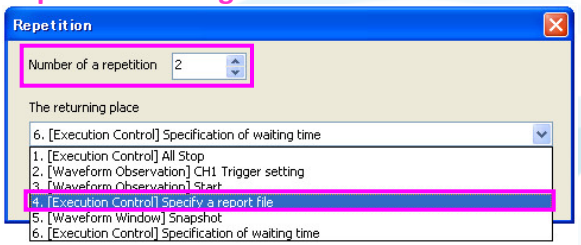
In this section, describes how to set the **flow**. The contents of the setting is the **Repetition** of the **Execution Control**.

1. When set up the **Repetition**, the dialog starts.
2. Set the **Repetition 2 times** and **4.[Execution Control] Specify a report file**.
3. When click the **OK button** of the **Repetition Dialog**, the setting is complete.

Setting the **Repetition**



Repetition Dialog



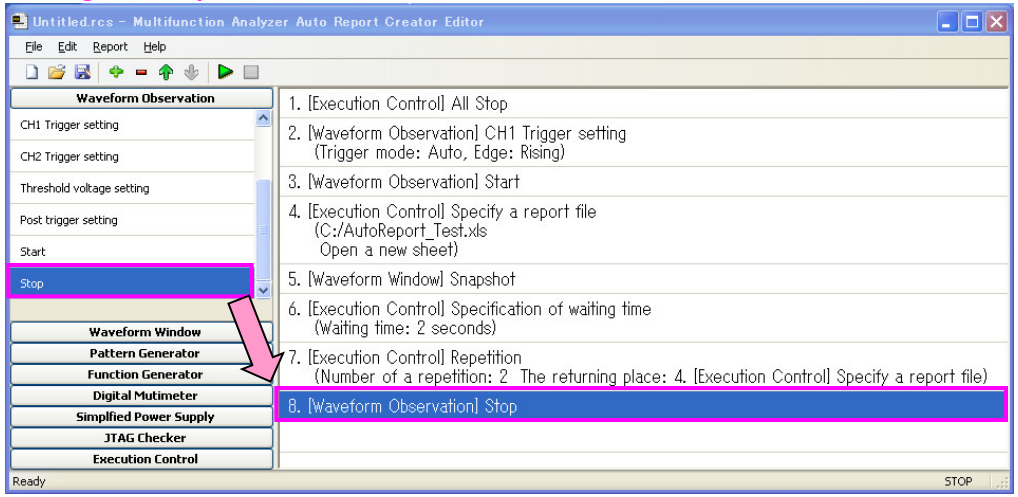
14. Setting the Flow 8

In this section, describes how to set the **flow**. The contents of the setting is the **Stop** of the **Waveform Observation**.

Set the **Stop**.

Setting the **flow** is completed.

Setting the **Stop**

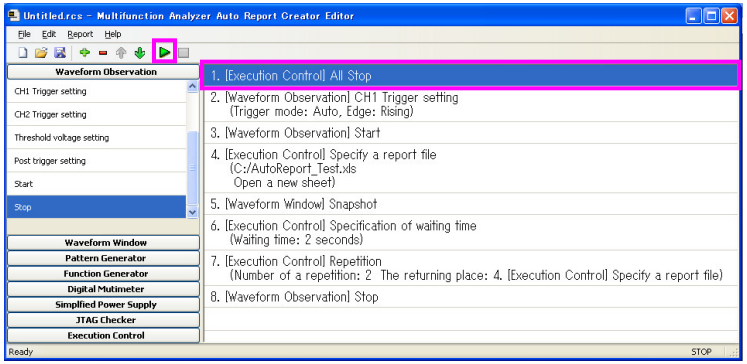


15. Automatic Execution

In this section, describes how to run the **flow**. Run the **flow** you have set, then create the Auto Report.

1. Click the **Start button**.

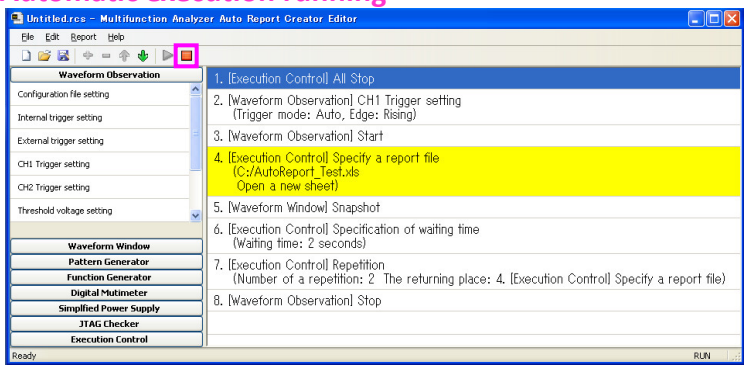
Click the **Start button**



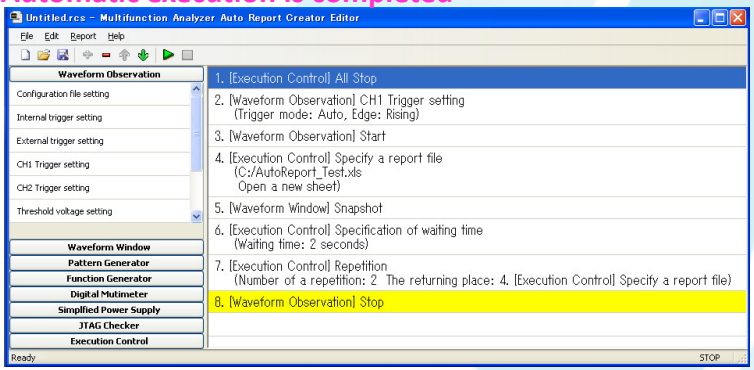
2. After starting, the **Start button** changes to **Stop button**, running task is displayed in yellow.

3. The **automatic execution** is complete When it reaches to **8.[Waveform Observation] Stop**.

Automatic execution running



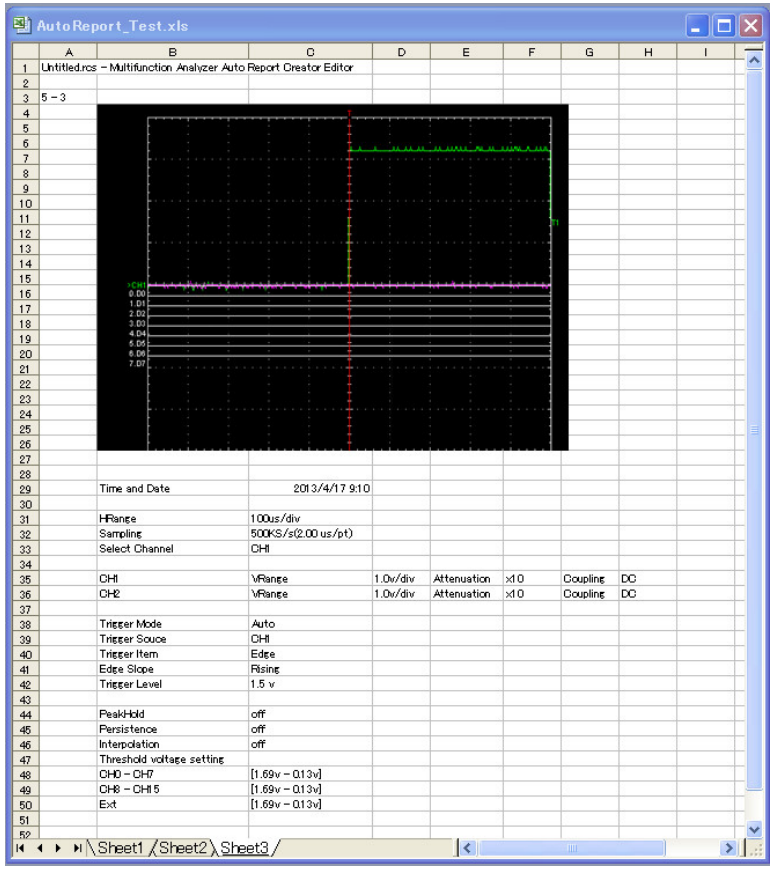
Automatic execution is completed



16. Checking the Auto Report

Finally, check the **Auto Report** .

1. Check the **saved folder** of the **Excel file**.
2. Open the **Excel file**. Then, check that there is the **Sheet1-3**.
3. Check that the **waveform of DSO CH1** is recorded on all sheets.



This tutorial is completed.

➢ In the setting **flow 4**, if you do not put a check in the **open a new sheet.** The waveform will be recorded in a single sheet.

➢ In the setting **flow 6**, was set to **2 seconds**. Also it can set by the **minute** or **hour**.

➢ In this **tutorial**, described using the only **DSO function**. It is possible to incorporate the auto execution also other functions [**LA, FG...PG**]. Try it.