

Macro Editor™ User Guide



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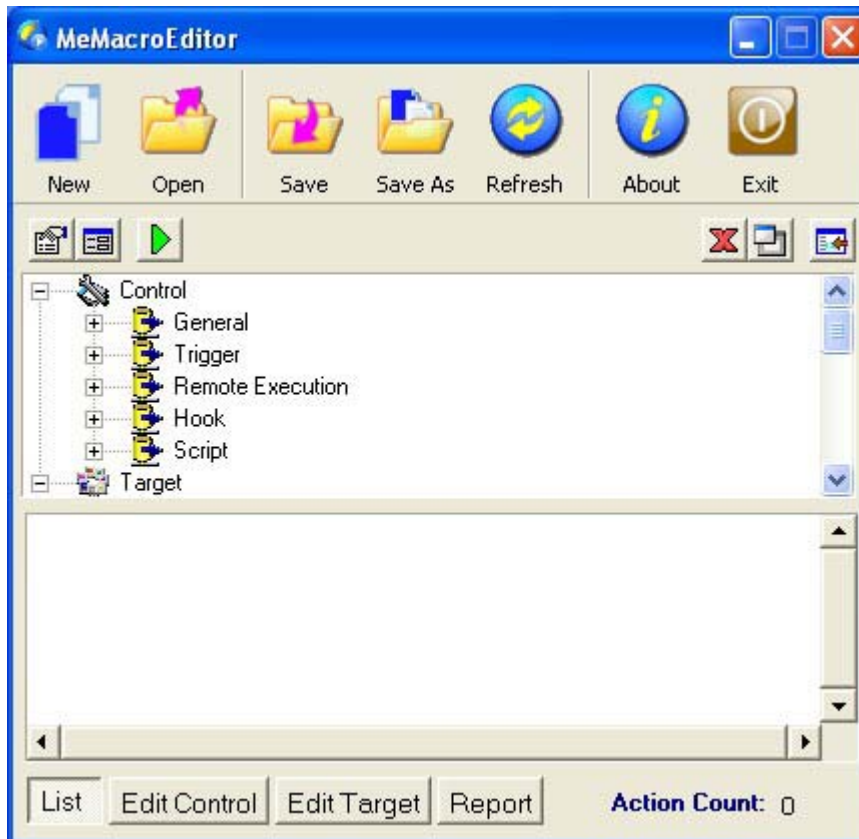
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1 What is Macro Editor?

Macro Editor is a tool for **Macro Independence** and allows you to develop Windows automation processes and a highly productive software package with an easy-to-use interface.

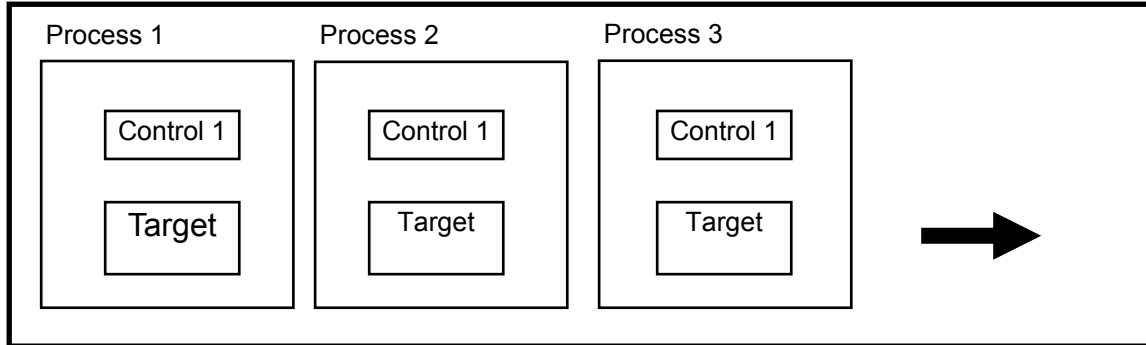
Figure 1.1 Macro Editor Tool



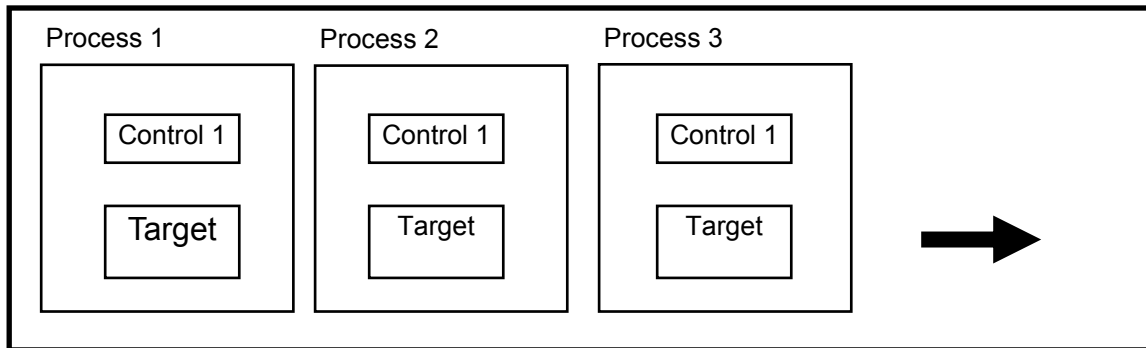
Structure of Macro File (.dat) Automation

Set your sequential file processes automatically by Macro Editor Tool.

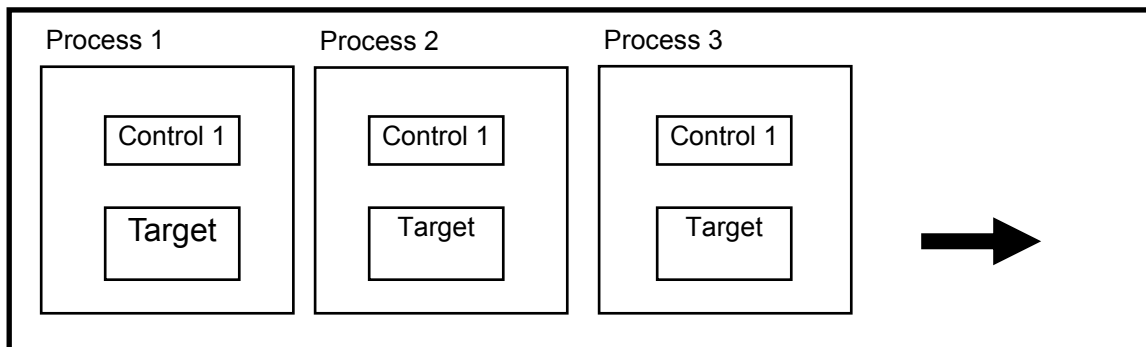
Event1 (.DAT)



Event2 (.DAT)



Event3 (.DAT)



Manager Main Window

Icon Click Process Tree View Builder

Without programming, just double click icon to build your process. Over thousand readily available combinations are available for automatic process.

Dynamical Process Design Window

Using left mouse button, dynamical arrange your Control and Target process Up and Down in front of main windows.

On Screen Monitor Window

Each process will be monitored on screen and show process status at real time.

Dynamical Database

Macro Editor uses dynamical database to save your work.

File Manager Panel

Create automation file shortcuts to manager processes.

Control

Trigger

A **Trigger** can be set to run at specific time intervals such as daily, weekly, hours, minutes or computer operated time etc. Furthermore, a **Trigger** can optionally run as a System Idle, CPU load, Memory available, Modem data transfer, Hardware Interface Input, COM port status, or Program process.

Network

Connect any computers running Macro Editor server and client processes. The **TCP/IP** networking protocol integrated into Macro Editor makes you can access your Macro process to remote client computer. In additional, computer could automatically wake up on receiving a wake up (Wake On LAN) Macro Editor command through a remote network interface when it is under power soft-off, suspend or sleep mode.

Note:

Wake On LAN (WOL) is an Advanced Configuration and Power Interface (ACPI) function allowing a powered down (sleeping) computer to be powered ON from a remote station. To use the WOL feature, the Network Interface Card and Moth board of the host PC must be ACPI compliant.

Hook

With the **Hook** feature of Macro Editor, you can **Hook** two different application data. **Hook** data technology could let you put your system to the Real Time Nervous System. In addition, a task can optionally run as a hotkey being pressed

Script Capabilities

With the Script feature of Macro Editor, lets you integrate **BASIC Program** language support into your automated procedures. Furthermore, an Input/Output function will help your data calculated result connect to any different application.

Logic

With **Logic**, you can control a Macro Editor Process flow in any condition. In seconds, you can create wait, loop, or error checking for your automation process.

Target

Application Program Monitor

Target with the **Application Monitor** feature of Macro Editor, you can monitor and control any application program. Such as, start to RUN, Keyboard press, or Close it. Multiple run programs with the same program name will be recognized separately

Macro

Use the powerful **Macro** engine, you could crate your automatic action without Keyboard, and Mouse. It records and plays back mouse and keyboard events action and will be saved in a file.

File Compress/Decompress

Let your program, or data file operation with File Compress/Decompress ability. Combined with Remote control, save you time for file transfer communication.

Internet Capabilities (Website Monitor)

With the web feature of Macro Editor, you can control a Macro Editor process from any Server/Client computer connected via Internet. You could use Macro Editor to monitor your Website (such as, WWW, FPT, TELN, SMTP, DNS, POP3, or IMAP service).

Hardware Output

Build your hardware interface system, send data output, and test it by Macro Editor.

Report

Macro Editor create Log In/Out report and will record any error message during system processing.

Development Environment

The Macro Editor integrated development environment consists of the following elements.

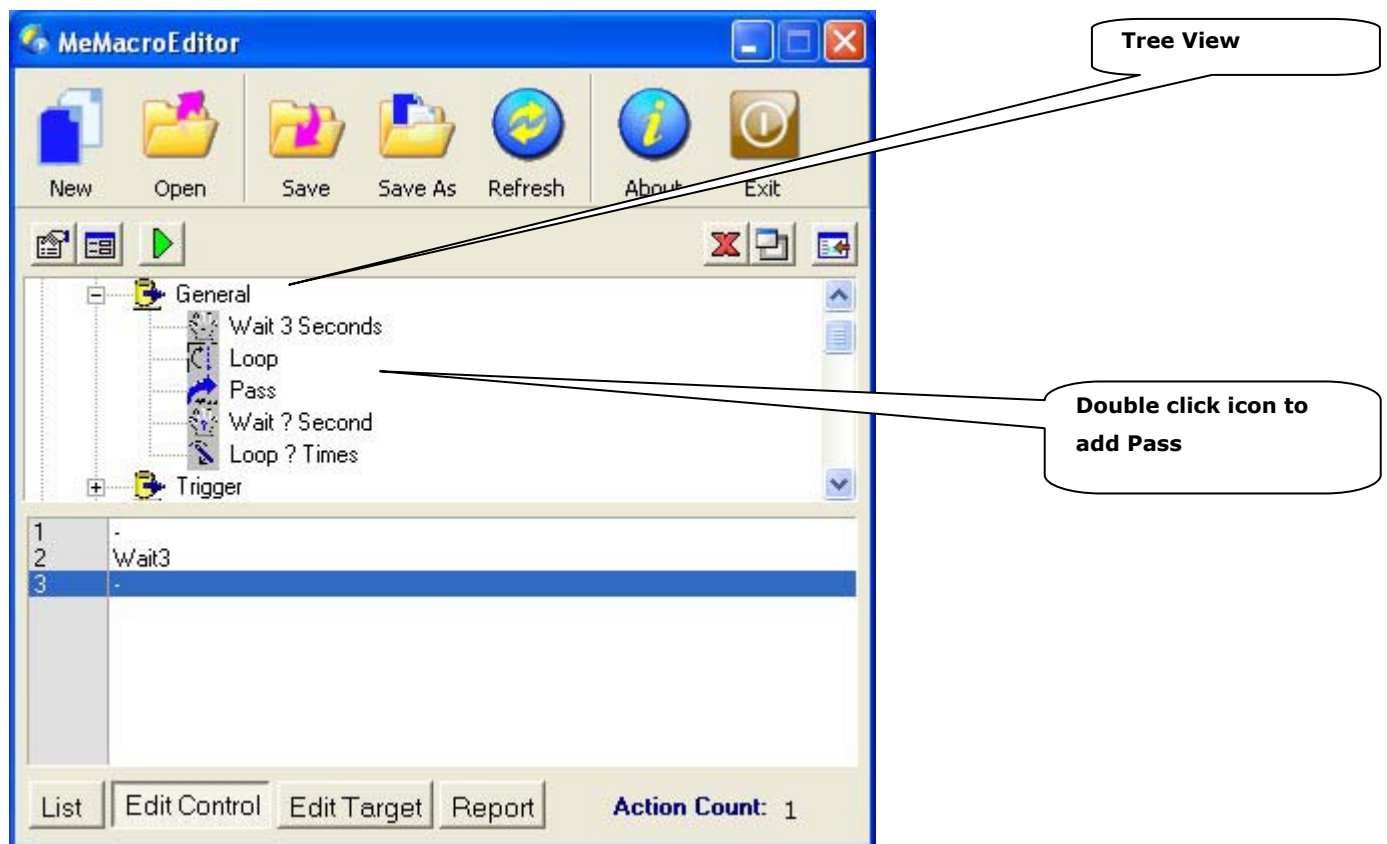
Control

A list of Control modules. Such as, General, Trigger, Communication, Remote Execution (Networking), Hook, Script modules.

Target

A list of Target modules. Such as, General, Application Monitor, Macro, Windows Control, File Events, Internet, I/O Events (Hardware Interface I/O), Screen Lock (Security), and IP Events.

Figure 2.1 Macro Tree View..



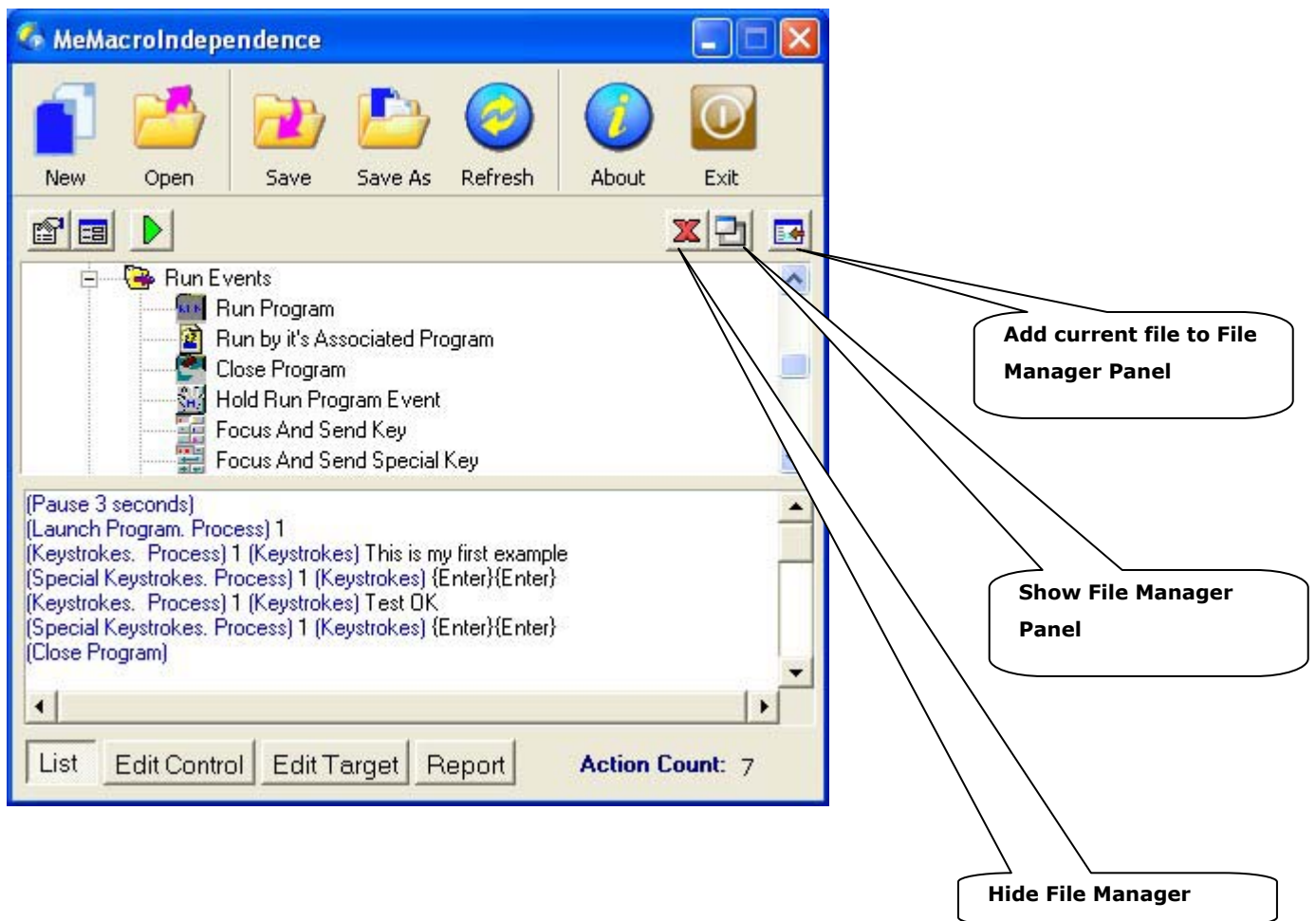
File Manager Panel

With the File Manager Panel, you can create, arrange, and manager a list (sequential) of automation processes.

Figure 2.2 File Manager Panel



Figure 2.3 Main Window

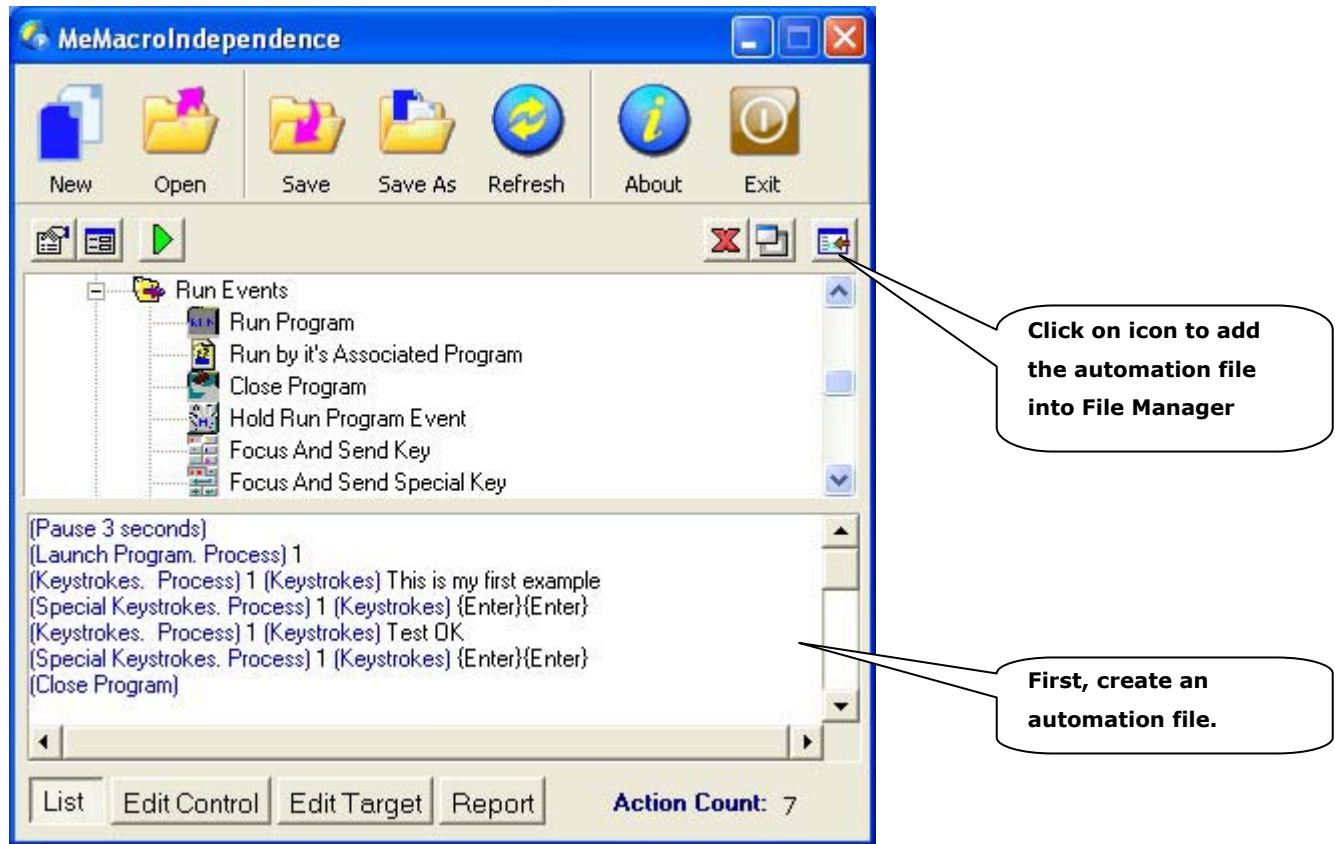


Two steps to build sequential of automation processes:

First, create an automation file.

Second, click on “Add Automation File” icon to add the file into File Manager Panel.

Figure 2.4 Add an automation file to File Manager Panel.



Execute: double click icon to launch automation process.

Figure 2.5 File Manager Panel

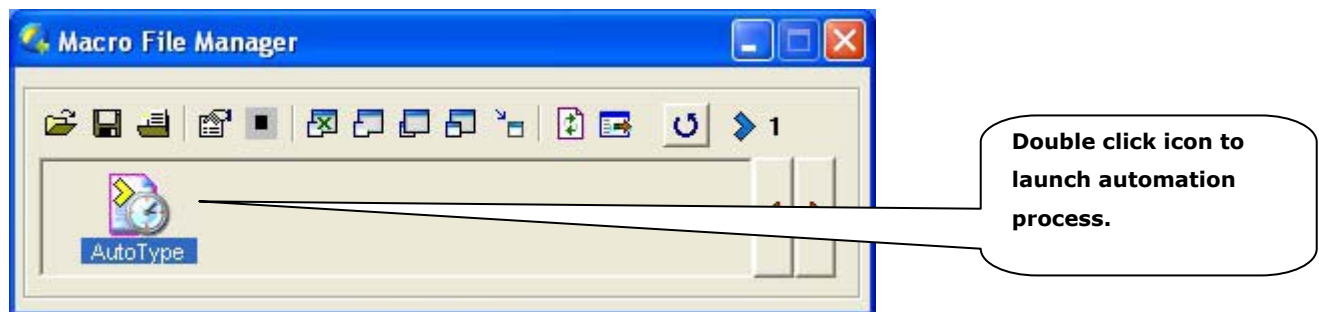
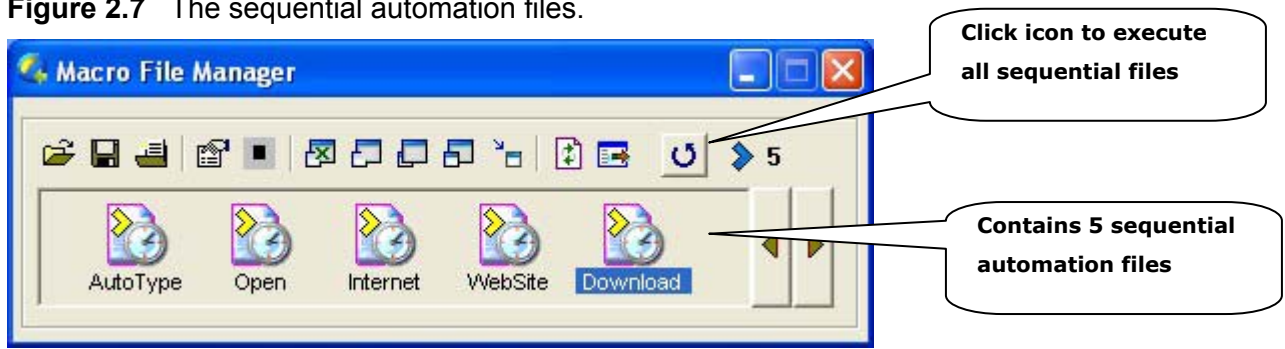


Figure 2.7 The sequential automation files.



File

Create New, Open, Save, or Save As project file for your automation process. The project file name will be saved as *.dat file for Macro Independence and please does not change .dat to any other extend name.

Refresh

Renew your automation process after RUN action is completed. You could find the "Completed" change to "StandBy.." at Report Section.

Test button


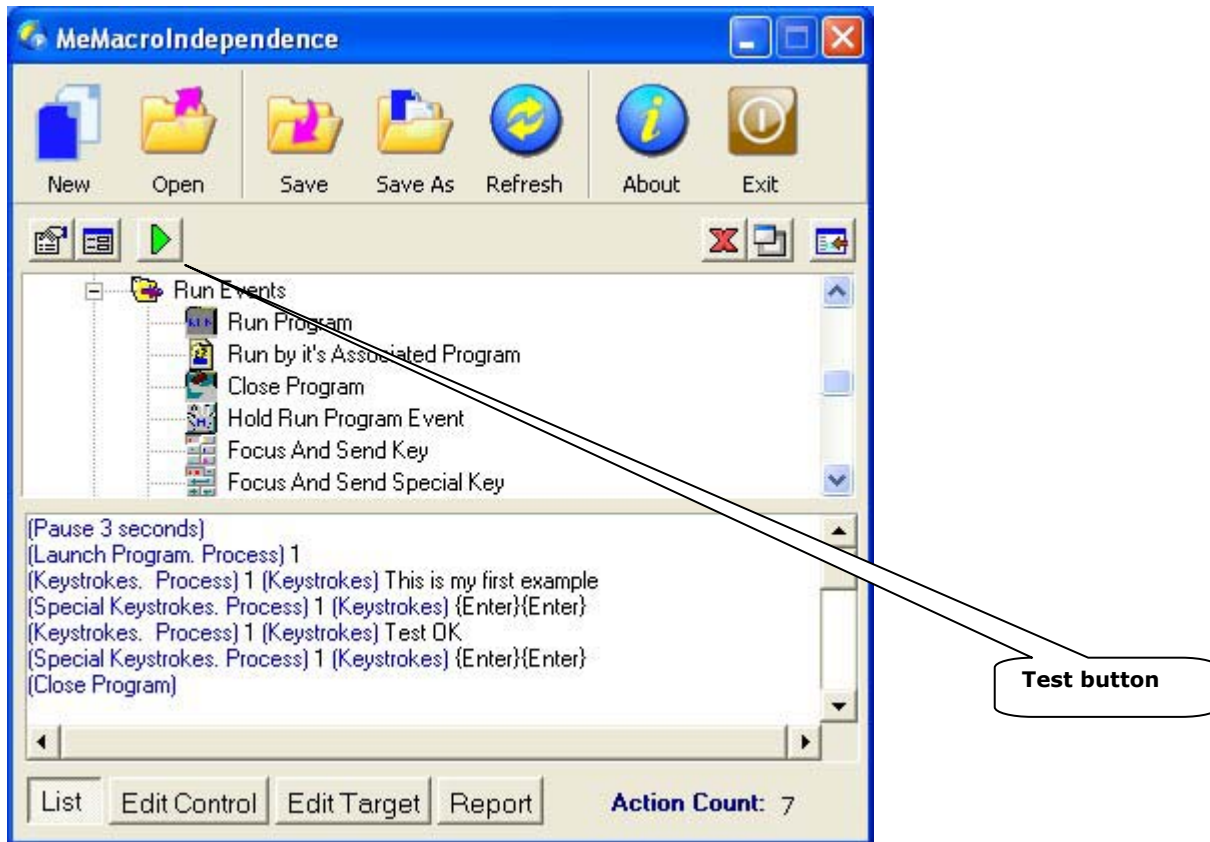
Click on  to start test process.

Figure 2.8 Test button



Stop button


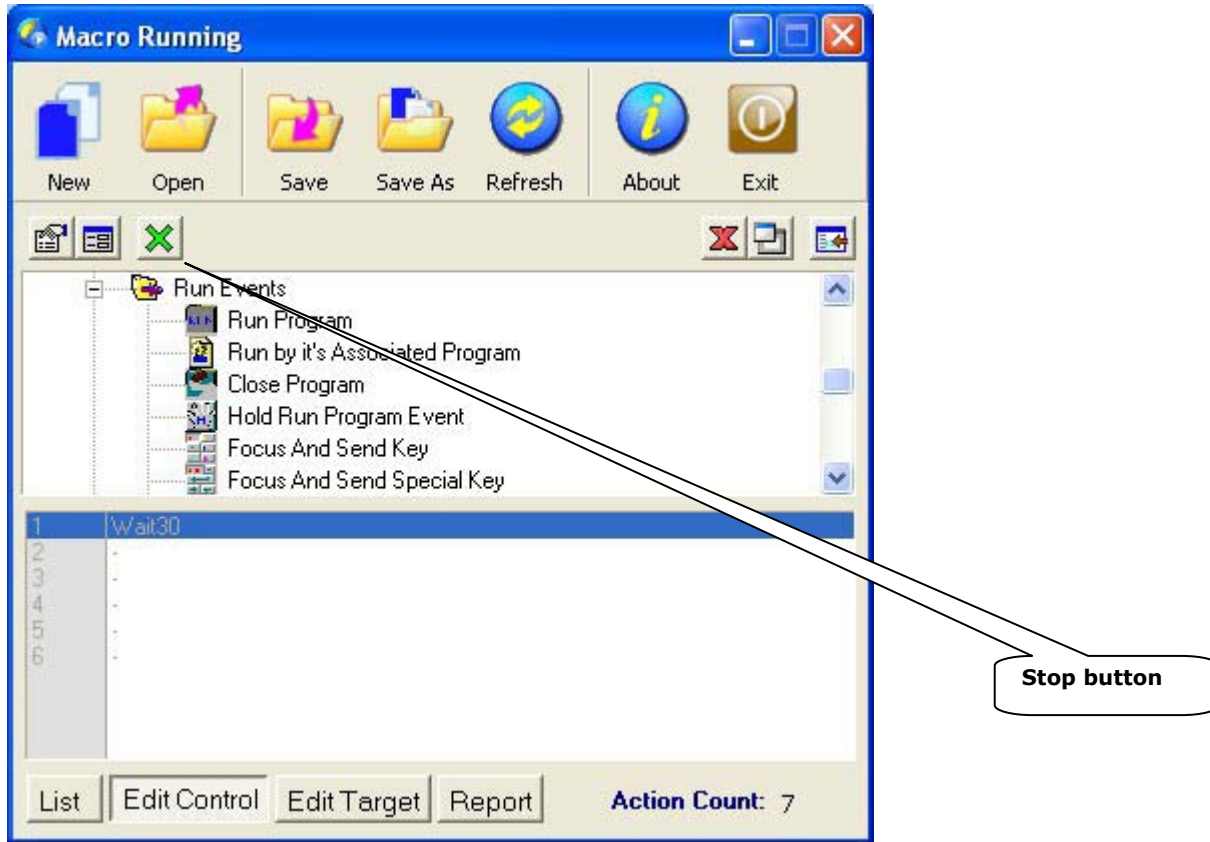
Click on  to stop your process imminently.

Figure 2.9 Test button



Program Script

Powerful BASIC Scripting is available in the Macro Editor. This scripting engine lets you integrate BASIC language support into your automated procedures. With BASIC Scripting, you can now have Macro Editor make decisions while a task is running. Scripting gives you full control of Hardware Interface I/O, Math Calculation, Message Windows and much more beyond your imagination. (For more information, see Macro Editor Control Developer Guide)

Figure 2.10 Script Tool

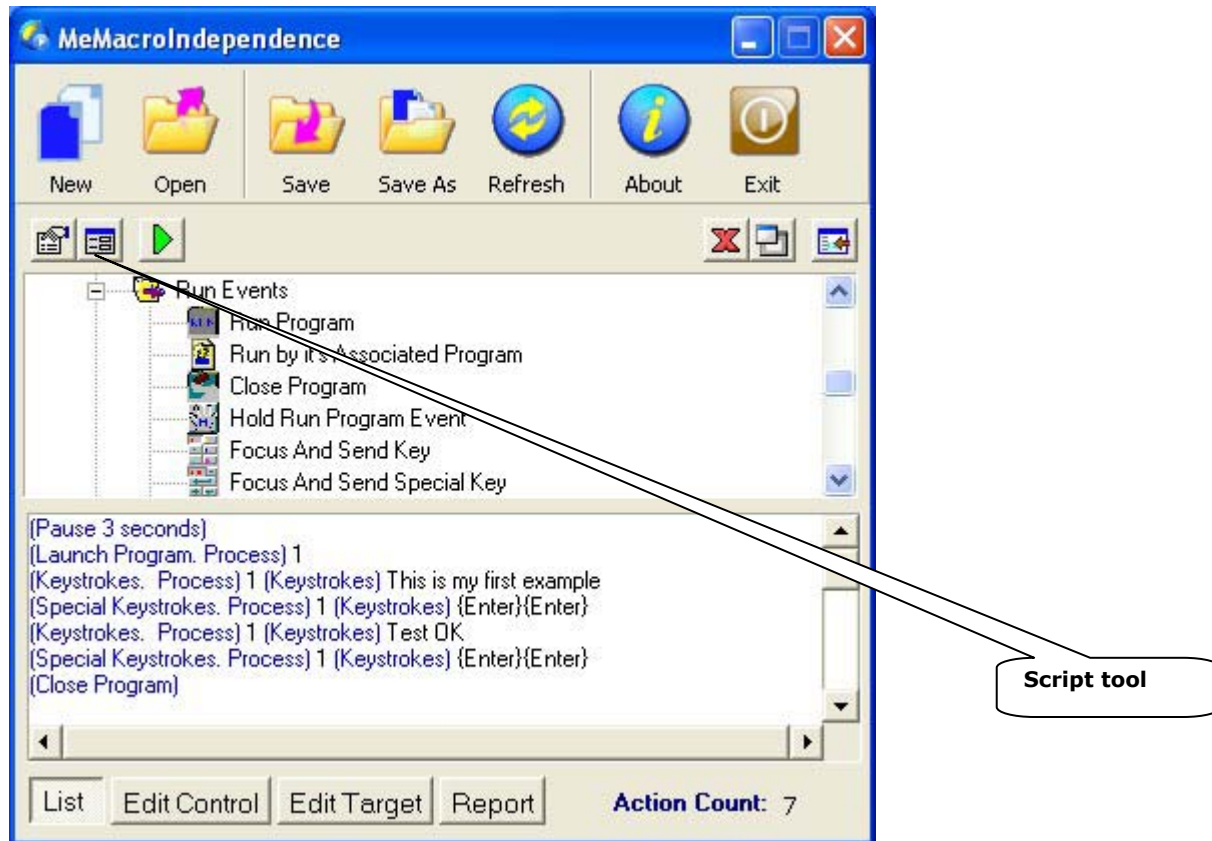
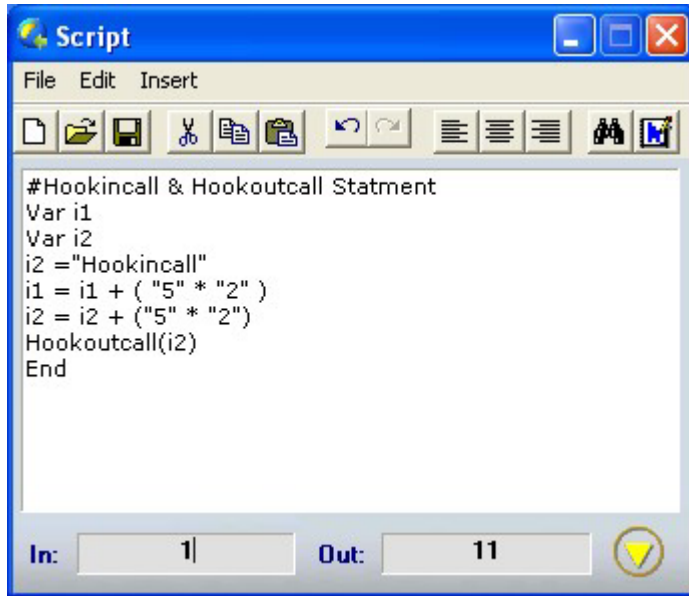


Figure 2.11 The Powerful Basic scripting engine is available in Macro Editor.



Program Performance

The Preferences dialog allows you to adjust aspects of Macro Editor Performance to suit system and tasks.

Figure 2.12 The Performance window.



Auto Process Max: Adjusts the Process Max values at which Macro Editor add Control & Target process of the automatic task. Base on your process tasks for Control and Target, decreasing the value for saving dynamical memory space during process running (Default: 50 processes, for each Control → Target).

Auto Run Max: Adjusts the Program Run Max values at which Macro Editor executes process of the Program Run. Depend on the number of Program Run module at Target, decreasing the value for saving dynamical memory space during process running (Default: 50).

Auto Wait Interval: Adjusts how much time Macro Editor should wait in-between each key press when sending keystrokes (Default: 10, $10/100 = 0.1$ second).

Auto Control # & Auto Target #: Adjusts the Tolerance of Control and Target at which Macro Editor executes each line of the running task. For slower machines, increasing a delay between steps improves task reliability when interacting with other applications that may not be able to react to Macro Editor fast enough (Default: 10, $10/100 = 0.1$ second).

Auto Key Press: Adjusts how much time Macro Editor should wait when sending keystrokes. On some faster machines, Macro Editor may type the keys too quickly, flooding the keyboard buffer and causing unpredictable results. Increasing this setting will prevent this from occurring. For special key press, use **Auto Wait Interval** instead (Default: 10, $10/100 = 0.1$ second).

Deleting or Moving Control or Target Components

To delete a component in the Control or Target window

- From the Control or Target window, **Press** left mouse button to choose components.
- **Release** left mouse button and **Press Delete** key from the keyboard.
Or Press right mouse button and select Delete from pop up menu.

To move a component in the Control or Target window

- From the Control or Target window, **Press** left mouse button to choose components.
- **Keep Press** left mouse button and **Move** to new position by **Up** or **Down**, then **Release** left mouse button.

Your First Macro Editor Sample

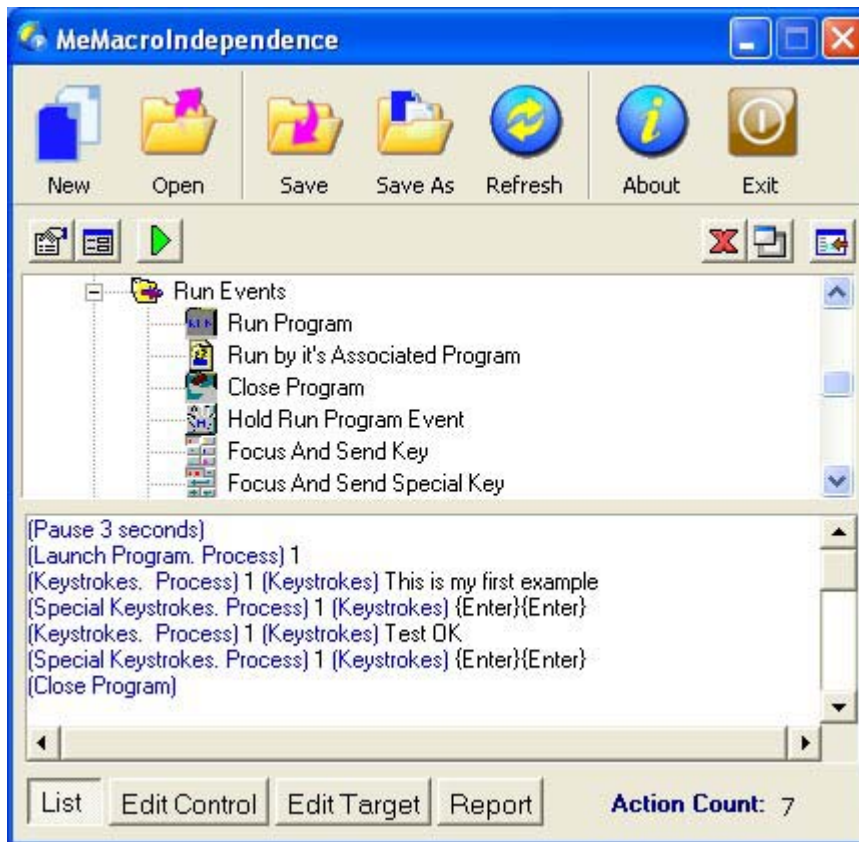
AutoType.dat

There are three main steps to creating a macro application for Macro Independence:

1. Create the Control and Target.
2. Configure the action.
3. Make connections.













To see how this is done, use the steps in the following procedures to create a simple application. When you click the Test button, the AutoType automation process will start.

Figure 2.13 The autotype.dat.



Creating the Control and Target

The first step in building a Macro Editor application is to create the Control and Target that will be the basis for your automation's interface. For this first application, you will use two items from the Control and three items from the Target.

Action Number	Control	Target
Process 1	 Wait 3 seconds	 Program Run
Process 2	 Pass	 Focus And Send Key
Process 3	 Pass	 Focus And Send Special Key
Process 4	 Pass	 Focus And Send Key
Process 5	 Pass	 Focus And Send Special Key
Process 6	 Pass	 Program Close

To Click a control and target using the tree view

- Click the Control Module icon for the **General** you choose.
- Double Click on the icon of—in this case, the **Wait 3 Seconds**.
- The **Wait 3 Seconds** will be added in the Control window list.
- Double Click (5 times) on the icon of—the **Pass**.
- To Click a Target using the Target Module button
- Click the Target Module icon for the **RUN Events** you choose.
- Double Click on the icon of—in this case, the **RUN Program**.
- The “**Run Program**” will be added in the Target window list.

Figure 2.14 The autotype.dat – Edit Control.

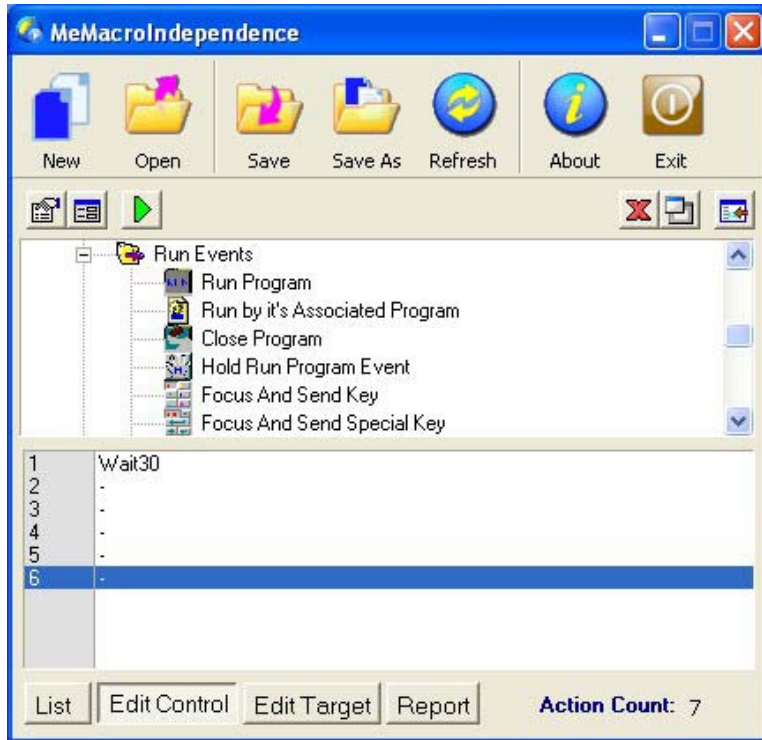
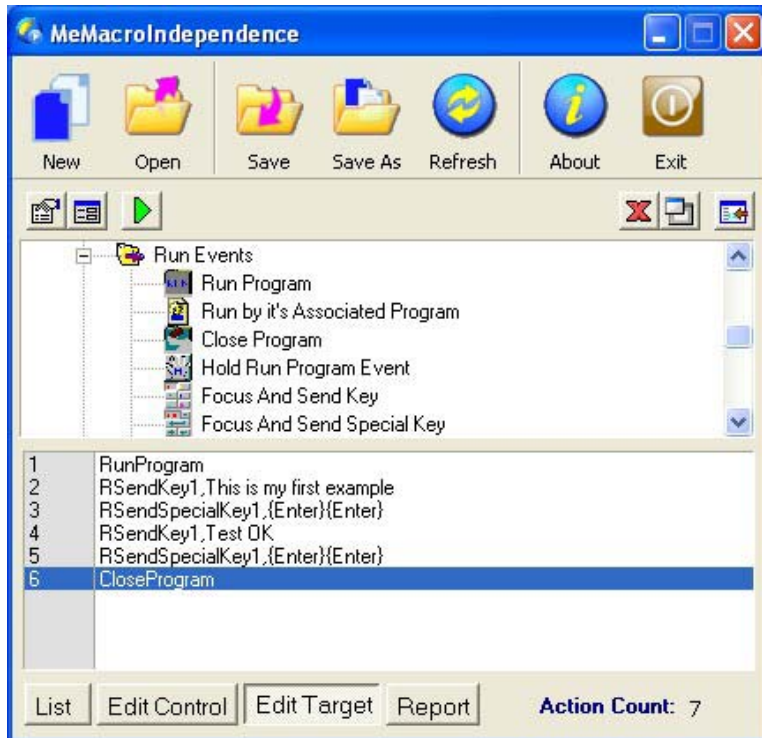


Figure 2.15 The autotype.dat – Edit Target.



Configure the Action

- Input file name which will be monitored—in this case, the program will be “Notepad.exe “.
- Click on Return button, back to main window.
- Double Click on the icon of—the **Focus And Send Key**.
- The Run Target Number box will appear—in this case, Focus Run Target Number will be **1** (Process **1**) and Click on Yes..
- Click on Yes then Key Send box will appear—type “This is my first example” and Click on Yes.
- Double Click on the icon of—the **Focus And Send Special Key**.
- The Run Target Number box will appear—in this case, Focus Run Target Number is **1** (Process **1**).
- Click on Yes then Special Key Send box will appear—type “{Enter}{Enter}” and Click on Yes.
- Double Click on the icon of—the **Focus And Send Key**.
- The Run Target Number box will appear—Focus Run Target Number will be the same as **1** (Process **1**).
- Click on Yes then Key Send box will appear—type “Test OK” and Click on Yes.
- Double Click on the icon of—the **Focus And Send Special Key**.
- The Run Target Number box will appear—Focus Run Target Number will be the same as **1** (Process **1**).
- Click on Yes then Special Key Send box will appear—type “{Enter}{Enter}” and Click on Yes.
- Double Click on the icon of—the **Close Program**.
- Set Target Number as—in this case, **1** (Process **1**).
- Click on Return button, back to main window.

Make connections and Save

- Save to a file accordingly.

Testing the Application

To test the application, click the Test button on the toolbar.

Stopping the Application

To stop the application during processing, click the Stop button on the toolbar.