



# Adaptive Computing Lab

## AutoHotkey Scripting Tutorial

AutoHotkey is a wonderful scripting tool that will allow the user to custom design a number of features, but I find the following to be the ones that are the most useful to persons who are adapting their computer input.

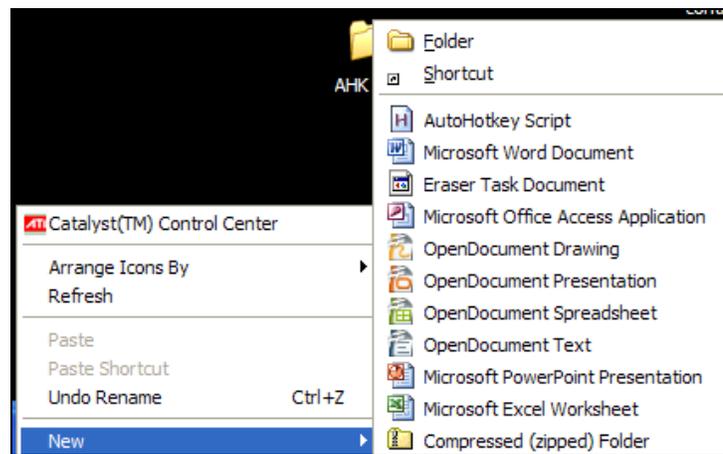
**Abbreviation Expansion:** By writing a script in Notepad, you can create an abbreviation that expand and thus save you keystrokes. This function is quite helpful in situations like passwords on the Internet, typing your long email address into a form, or reproducing any kind of “boilerplate” text that you use frequently.

**Key remapping:** Using AutoHotkey you can “remap” any key on the keyboard. For example, the Windows Logo key to the right of the space bar could be changed so that it is now the Escape key. For example, this would be a great help for a user who is not able to get to the regular ESC key.

**Hotkeys:** This utility can be used to create hotkeys to perform any number of tasks, for example open a specific web site. Hotkeys can be made to be almost any combination of a key or button. Thus, I could create a hotkey combination (such as ALT + G) that would open my website ([www.ggober.com](http://www.ggober.com)). This means that I could use the hotkey at anytime and my default browser would open to that webpage. The hotkey could also run programs, produce pages of text, etc.

## Script Type #1: Create an Abbreviation Expansion

**Step One:** Right click on the Desktop. This will bring up a Sub-context menu similar to the one below. Left click on New and there will be another menu that will roll out to the right. In that right menu find the AutoHotkey Script option and left click it to select.



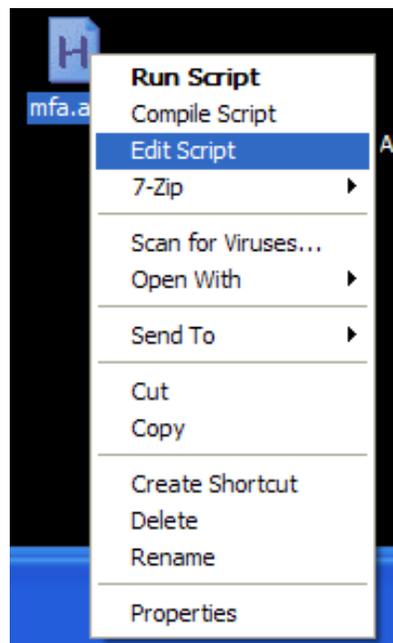
**Step Two:** This will create an icon on your Desktop that will be similar to the one shown below. Note that the name of the file “New AutoHotkey Scrip.ahk” is highlighted and it is ready to be renamed. It may be named anything as long as the file has an extension of “.ahk. All AutoHotkey Scripts are written and edited in Notepad and Notepad files typically end in .txt. All .ahk files will run in the Tasktray and any scripts in them will be honored by Windows. Let’s name this new script “mfa.ahk”.



**Step Three:** Do not Double left click on the icon to open this script for editing. The normal double click method will not open this file for editing...the double click will actually run the script and an icon, a green H like the one shown below... will appear in the Systray in the bottom right corner of the screen. This means that our script is running.



However, we do not want to run the script at this time, we want to edit it. To do this, right click on the file icon, then left click on the Edit Script option.



**Notepad will now open this .AHK file. It will look similar to the document shown below.**

A screenshot of a Notepad window titled 'mfa.ahk - Notepad'. The window contains the following text:

```
File Edit Format View Help
:
: AutoHotkey Version: 1.x
: Language: English
: Platform: win9x/NT
: Author: A.N.Other <myemail@nowhere.com>
:
: Script Function:
:   Template script (you can customize this template by editing
"shellNew\Template.ahk" in your windows folder)
:
:
#NoEnv ; Recommended for performance and compatibility with future AutoHotkey
releases.
SendMode Input ; Recommended for new scripts due to its superior speed and
reliability.
SetWorkingDir %A_ScriptDir% ; Ensures a consistent starting directory.
```

Go down to the open space at the bottom of the pre-prepared lines of text. There we will type our first script.

To create an abbreviation expansion we use the following formula. Start the line with a colon followed by a colon. Then type the abbreviation. Then type a colon followed by a colon. Then type the text that you wish to insert. As our first script we are going to create an abbreviation, “mfa” which when typed (followed by a space or by a period) will expand to “my first abbreviation”. Type the script as shown below and then hit Enter.

```
::mfa::my first abbreviation
```

Go to the File menu and select Save. Close the file.

**Step Four:** Test the script... double click on the file icon (for file “mfa.ahk”) to make this script file active. You will see the green H icon appear in the System Tray. This means that our script file is active and any script in this file will function.

To test our script, open a Word document, or a Wordpad document, etc. Then type the abbreviation “mfa” followed by the space bar. This should immediately expand to “my first abbreviation”. In simple terms, you may use this formula and the replacement text may be anything up to a single line of text.

In general, your abbreviation may also expand to an extremely long string of text...if that string of text needs to be longer than a line it is helpful to use the following formula: a double colon, the abbreviation, a double colon, then an opening parenthesis, and finally a closed parenthesis. Everything in between the parentheses will be the text string that will replace the abbreviation.

\*\*\*\*\*

```
::mfalong::  
(
```

Any text that is in between the opening parentheses and the closing parentheses will be the expansion. A carriage return will be preserved.

So in this example, the spaces would appear as part of the expanded text string.

```
)
```

\*\*\*\*\*

You may have as many abbreviation expansion scripts as you wish, as long as each script starts with the double colon and follows the formulas as provided above.

Be careful to not use a real word as your abbreviation.

## Script Type #2: Remapping a key

Remapping lets you take a keyboard key and have it send a different code to the computer. Let's begin with a simple example. We are going to change the Alt key that is to the right of the space bar. We will remap this key so that it becomes a "4" key. This will not change our regular 4 key. It will still send a 4. We are only going to remap the right Alt key → 4.

**Step One:** As shown in the previous instructions...right click on the Desktop. This will bring up a Sub-context menu. Left click on New and there will be another menu that will roll out to the right. In that right menu find the AutoHotkey Script option and left click it to select.

**Step Two:** Let's name this new script "remap.ahk". Right click on the "remap.ahk" icon and select "Edit Script". Go to the blank section at the bottom.

The formula to remap a key is as follows: the name of the key followed by the double colon and the remapped key. The script name for the right ALT key is "RAIt". Enter the line of script shown below:

```
RAIt::4
```

**Step Three:** Test the script... Save and Close the file. Double click on the icon to make it active. Open a Word document and test our remap script. Hit the right Alt key and a 4 should appear in the document.

This remap will only occur when this script is active. To restore the right Alt key to its normal status we only need to close the script file...right click on the H icon in the Systray and select Exit.

Additionally, we can permanently kill the script file or we could edit the script file and just delete that one remap command.

(Note: A list of the Key names and mouse button names is available at:

<http://www.autohotkey.com/docs/KeyList.htm>)

## Script Type #3: Hotkey combo

We can create a keyboard combination shortcut that can do any number of tasks. It could run a program, open a certain website, type a certain text, send a series of keystrokes to the computer, etc. In our example we will create a keystroke combo that will open my website that has information about Assistive Technology.

You should opt to create a keystroke combo that uses a modifier key such as Shift, or Ctrl, or Alt plus another key. You should select a combo that is not already used by Windows or typical applications. For example, Ctrl + S = Save. We would not want alter this important command. In our example we will program Alt + T to go to the website with the address of [www.assisttech.info](http://www.assisttech.info).

The formula for creating the Hotkey combo is as follows: enter the key combination followed by colon-colon. Then follow with the command you wish to attach to that key combination. The symbol for the ALT modifier key is “!”. Enter the script below:

```
!T::Run www.assisttech.info
```

This script will create the ALT + T Hotkey combo that will open a browser and go the address provided. This is all you need to do if that is the single command.

If you wish to run multiple commands you would follow the pattern shown below...use the same pattern and then add commands typed on individual lines and conclude the list of command with the word “return”. The script below will open the Notepad applet, the Calculator applet, a browser loaded with [www.assisttech.info](http://www.assisttech.info) and another copy of the browser loaded with [www.ggober.com](http://www.ggober.com).

```
!T::  
Run Notepad  
Run www.assisttech.info  
Run www.ggober.com  
Run calc  
return
```

.....

There are many other powerful scripting tools available in AuthHotkey. Great information is available on their website at: [www.autohotkey.com](http://www.autohotkey.com)