# AutoGenKey

**2016/02/16 Tony**

## Structure:

1. Declare Variables
2. Default Setting
3. Loop

## Declare Variables:

**Define:**

All lines from begin to <Script>.

**Example:**

1. MAC\_Prefix=0C4CB8
2. SN\_Prefix=S140Y10
3. SSIDGen=
4. PasswordGen=
5. Login=
6. SSIDDut=
7. PSKDut=
8. Mac\_Base=532390

**Precautions:**

1. Lines must have "=", else will pop out message box then quit program.
2. If line is blank space, program will skip the line.

## Default Setting

**Define:**

All lines between <Script> and <Loop>.

**Instructions:**

1. **Command\_Set**|Firm\_Series command

Example: Command\_Set|CI\_Login|Linux|%CI\_Username|%CI\_Password

1. **Wait**|waiting seconds

Example: Wait|3

1. **Excel\_Format**|Column Name|Column Width(|Column Name|Column Width|...)

Example: Excel\_Format|MAC|13.5|SN|8.35

//It means excel column A1 input “MAC”, column A with 13.5 width, B1 input “SN”, column B with 8.35 width

**Precautions:**

Command\_Set and Wait should be the first of Line.

/\*

Program condition Instr(….)=1

With Comment Block => we can block like “**’**Wait|3” or “**/**Wait|3”…

\*/

## Loop

**Define:**

All lines between <Loop> and </Loop>.

**Instructions:**

1. **Command\_Set**|Firm\_Series command

Example: Command\_Set|CI\_Login|Linux|%CI\_Username|%CI\_Password

1. **Pure\_Cmd**|Command input to console

Example: Pure\_Cmd|ifconfig ppp0 //This Command will input at console directly.

1. **Wait**|waiting seconds

Example: Wait|3

1. **Excel\_Write**|Column|Var

Example: Excel\_Write|A|%MAC

1. **Excel\_Check**|Column|Var1|Var2

Example: Excel\_Check|A|%MAC|$MAC\_DUT //Check if MAC and MAC\_DUT is same or not.

//If same=>PASS, else=>FAIL

1. **Excel\_Format**|Column|Format value

Example: Excel\_Format|A|8.38

1. **MAC\_Generate**|$MAC\_Prefix

Example: MAC\_Generate|$MAC\_Prefix|Serial //Serial means start from (12- length of (MAC\_Prefix))\*0

//Serial=Serial+1

MAC\_Generate|$MAC\_Prefix|0/8 //MAC=MAC\_Prefix+Random+0 or 8

//length of (MAC\_Prefix+Random)=11

MAC\_Generate|$MAC\_Prefix|0/4/8/C //MAC=MAC\_Prefix+Random+0 or 4 or 8 or C

MAC\_Generate|$MAC\_Prefix //All Random after MAC\_Prefix

MAC\_Generate|$MAC\_Prefix|Add|$MAC\_Base|Hex //From MAC\_Base + (Hex Number)\*Round

MAC\_Generate|$MAC\_Prefix|Even

1. **MAC\_Load**|Column

Example: MAC\_Load|A //%MAC will equal to the column of A

1. **SN\_Generate**|$SN\_Prefix|Length of SN

Example: SN\_Generate|$SN\_Prefix|13

1. **SN\_Load**|Column

Example: SN\_Load|A //%SN will equal to the column of A

1. **Key\_Generate**|Utility\_Path|Command(|Command|Comamnd|...)

Example: Key\_Generate|%Utility\_Path|WJI-WiFiAutoGenKey-v1.2.exe out.txt %MAC %SN 8 1 1 1 MOVISTAR\_ 0 TELEFONICA\_SPAIN > password.txt //By Product utility defined

1. **Get\_Key**|Result file|Data format|Parameter(|Parameter|Parameter|...)

Example: Get\_Key|%Utility\_Path\password.txt|Label\Split:Tab|%SN\1\SSIDGen|%SN\2\PasswordGen

Get\_Key|%Utility\_Path\password.txt|Split:Tab|2\SSIDGen|3\PSKGen|4\WPSGen|5\PasswordGen

Get\_Key|%Utility\_Path\password.txt|Label\Index|%SN\46\PasswordGen

1. **Get\_Key\_Last\_CLI|**Var //Example:PMG5318-B20B\_Console

Get\_Key\_Last\_CLI|PSKDut

//#nvram get wl0\_wpa\_psk

// JKPHJR77W9

//#

// $PSKDut= JKPHJR77W9

1. **Key\_Load**|Column|Var

Example: Key\_Load|A|SSID //$SSID will equal to the column of A

1. **GUI\_Script**|Project Name.vbs

Example: GUI\_Script|MarcopoloSpain.vbs

1. **Log\_Start**|Log\_Path

Example: Log\_Start|C:\Documents and Settings\Tony.Hsieh\Desktop\Report.log

1. **Log\_Stop**

Example: Log\_Stop

1. **Left(Right)**|Parameter|Index|Var

Example: Key\_Load|B|SSIDDut //$SSIDDut will equal to the Cclumn of B

Left(Right)|$SSIDDut|4|PSKDut //PSKDut = 4 characters of $SSIDDut from left(right)

1. **UCase(LCase)**|Parameter|Var

Example: Key\_Load|B|SSIDDut //$SSIDDut will equal to the Cclumn of B

UCase(LCase)|$SSIDDut|PSKDut //PSKDut = UCase(LCase) of $SSIDDut

1. **RegEx\_Check**|Column|Input value|Pattern

Example: RegEx\_Check|B|%MAC|\w //Check regular expression of %MAC

// If match=>PASS, else=>FAIL

1. **Write\_File**|File\_Path

Example: MAC\_Generate|$MAC\_Prefix

Write\_File|Maroc.log|MAC=%MAC|MAC\_Prefix=$MAC\_Prefix

1. **Msgbox**|message

Example: Msgbox|%MAC

**Precautions:**

1. Command\_Set and Wait should be the first of Line.
2. MAC\_Base should not bigger then FFFFFFF

/\*

MAC\_Base will change Hex to Dem(16 to 10)

If MAC\_Base is bigger than FFFFFFF

Dim xxx long will overflow

\*/

## Example1

MarcoPolo

//Declaration of variables

MAC\_Prefix=0C4CB8

SN\_Prefix=S140Y10

SSIDGen=

PasswordGen=

Login=

SSIDDut=

PSKDut=

MAC\_Base=532390

<Script>

//Default Setting

Excel\_Format|MAC|13.5|SN|13.5|SSID|13.5|Password|WPA-PSK|16.13|SSID GUI|13.5|Password GUI|16.13|SSID check|8.38|WPA-PSK check|8.38

Command\_Set|CI\_Login|Linux|%CI\_Username|%CI\_Password

<Loop>

//Loop

MAC\_Generate|$MAC\_Prefix|Add|$MAC\_Base|B //At first run, %MAC will be MAC\_Prefix & MAC\_Base = 0C4CB8532390

// At second run, %MAC will be MAC\_Prefix & MAC\_Base+B = 0C4CB853239B

// At third run, %MAC will be MAC\_Prefix & MAC\_Base+2\*B = 0C4CB85323A6

Excel\_Write|A|%MAC

SN\_Generate|$SN\_Prefix|13

Excel\_Write|B|%SN

Key\_Generate|%Utility\_Path|WJI-WiFiAutoGenKey-v1.2.exe out.txt %MAC %SN 8 1 1 1 MOVISTAR\_ 0 TELEFONICA\_SPAIN > password.txt

Get\_Key|%Utility\_Path\password.txt|Label\Split:Tab|%SN\1\SSIDGen\3|%SN\2\PasswordGen

Command\_Set|Debug\_Mode|Custom|sys reboot|Hit any key to stop autoboot|Enter|ZHAL>

Wait|3

Command\_Set|CI\_Cmd\_More||atbt 1|2|atwz %MAC|2|atsn %SN|2|atbr|2|y|2|atgo|2

Wait|100

GUI\_Script|MarcopoloSpain.vbs

Excel\_Write|E|$SSIDDut

Excel\_Write|F|$SSIDDut

Excel\_Check|G|$SSIDGen|$SSIDDut

Excel\_Check|H|$PasswordGen|$PSKDut

</Loop>

</Script>

## Example2

M4G-314M1W.

//Declaration of variables

MAC\_Prefix=C86C87

SN\_Prefix=S120Y23

SSIDGen=

PSKGen=

SSIDDut=

PSKDut=

<Script>

//Default Setting

Excel\_Format|MAC|12.63|SN|15.5|SSID|8.88|WPA-PSK|18.5|SSID|6.88|WPA-PSK|10.13

Command\_Set|CI\_Login|Linux|%CI\_Username|%CI\_Password

<Loop>

//Loop

MAC\_Generate|$MAC\_Prefix|0/8 // %MAC will be C86C87XXXXX0 or C86C87XXXXX8. XXX means random.

Excel\_Write|A|%MAC

SN\_Generate|$SN\_Prefix|13

Excel\_Write|B|%SN

Key\_Generate|%Utility\_Path|ZLD\_SSID\_PSK\_Generator.exe password.txt %MAC %SN 8 1 1 1 DIRECTV- 6 HUAWEI\_DIRECTV 8 1

'Wait|3

Get\_Key|%Utility\_Path\password.txt|Label\Split:Tab|S120Y23418465\2\SSIDGen|S120Y23418465\4\PSKGen

Excel\_Write|C|$SSIDGen

Excel\_Write|D|$PSKGen

Right|$SSIDGen|6|SSIDGen // SSIDGen will be right of 6 characters of SSIDGen

Excel\_Write|G|$SSIDGen

Command\_Set|Debug\_Mode|Lantiq

Wait|3

Command\_Set|CI\_Cmd\_More||atbt 1|2|atwz %MAC, F0|2|a|1|a|1|a|1|a|1|atbt 1|2|atsn %SN|1

Wait|90

Command\_Set|CI\_Login|Linux|%CI\_Username|%CI\_Password

Command\_Set|CI\_Cmd|sys romreset 1

Wait|90

Command\_Set|CI\_Login|Linux|%CI\_Username|%CI\_Password

Command\_Set|CI\_Cmd\_More||rm /tmp/sid 2> /dev/null;|1|echo "RDMNAME config;" >> /tmp/sid;|1|echo "REQUEST" >> /tmp/sid;|1|echo "SEL InternetGatewayDevice.LANDevice.1.WLANConfiguration.1;" >> /tmp/sid;|1|echo "GET SSID;" >> /tmp/sid;|1|echo "SEND;" >> /tmp/sid;|1

Log\_Start|%Utility\_Path\SSID.log

Pure\_Cmd|ccctest -f /tmp/sid | grep " Value="; // “ccctest -f /tmp/sid | grep " Value=” will input at console

Wait|3

Log\_Stop

Wait|1

Get\_Key|%Utility\_Path\SSID.log|Label\Index| Value=DIRECTVNET1\28\SSIDDut

Command\_Set|CI\_Cmd\_More||rm /tmp/psk 2> /dev/null;|1|echo "RDMNAME config;" >> /tmp/psk;|1|echo "REQUEST" >> /tmp/psk;|1|echo "SEL InternetGatewayDevice.LANDevice.1.WLANConfiguration.1.PreSharedKey.1;" >> /tmp/psk;|1|echo "GET KeyPassphrase;" >> /tmp/psk;|1|echo "SEND;" >> /tmp/psk;|1

Log\_Start|%Utility\_Path\PSK.log

Pure\_Cmd|ccctest -f /tmp/psk | grep " Value=";

Wait|3

Log\_Stop

Wait|1

Get\_Key|%Utility\_Path\PSK.log|Label\Index| Value=\16\PSKDut

Excel\_Check|E|$SSIDGen|$SSIDDut

Excel\_Check|F|$PSKGen|$PSKDut

Excel\_Write|H|$SSIDDut

</Loop>

</Script>

# GUI Result

## Document Object Model

1. Install “IE WebDeveloper V2”.
2. Use IE WebDeveloper V2 to check element and put it into vbs.
3. Write down GUIResult.txt.

## Structure:

1. Open IE
2. Find Elements
3. Write back

## Open IE

// Declare IE

Dim IE

'Open IE for GUI login

Set IE = CreateObject("InternetExplorer.Application")

With IE

.Visible = True

// Open website

.Navigate ("http://192.168.1.1/Technicolor/login.cgi")

// ReadyState = 4 means open completely

Do While .ReadyState <> 4

WScript.Sleep 1000

Loop

End With

/ /Close IE

IE.Quit

Set IE = Nothing

## Find Elements

By using IE WebDeveloper V2 at Technicolor login page.

We can find login page as below:

For username

***document.forms.form1.username***

For password:

***document.forms.form1.password***

For login button:

***document.forms.form1.btn***

If we want to set value to username and password, add “IE.” in front of DOM and “.value” behind of DOM.

***IE.document.forms.form1.username.value=”admin”***

***IE. document.forms.form1.password.value=”1234”***

If we want to click login button, add “IE.” in front of DOM and “.click” behind of DOM.

***IE.document.forms.form1.btn.Click***

Now we login successfully!!

If we want to get value from GUI

Add “***.value***” or “***.innerText***” or “***.innerHTML***” behind of DOM

For Example:

SSIDDut = IE.document.all.view.contentWindow.document.forms.wlbasic.ssid.Value

PSKDut = IE.document.all.view.contentWindow.document.forms.wladv.pskey.innerText

## Write Back

Dim fso

Set fso = CreateObject("Scripting.FileSystemObject")

Set f = fso.OpenTextFile("GUIResults.txt", 2, True)

f.Write " SSIDDut =" & SSIDDut & Chr(13) & Chr(10)

f.Write " PSKDut =" & PSKDut & Chr(13) & Chr(10)

f.close

## Example

MarcoPolo

On Error Resume Next

Dim IE

Dim fso

Dim SSIDDut, PSKDut

'Open IE for GUI login

Set IE = CreateObject("InternetExplorer.Application")

With IE

.Visible = True

.Navigate ("http://192.168.1.1")

Do While .ReadyState <> 4

WScript.Sleep 1000

Loop

End With

// WScript.Sleep means let script pause 5000(ms) = 5 seconds

WScript.Sleep 5000

Login=""

'Login

IE.document.getElementById("overridelink").Click

'Do While .ReadyState <> 4

WScript.Sleep 10000

'Loop

IE.document.forms.login.pass.Value = "1234"

IE.document.forms.login.Login\_ID.Click

Do While IE.ReadyState <> 4

WScript.Sleep 1000

Loop

WScript.Sleep 5000

Set IE2 = CreateObject("InternetExplorer.Application")

With IE2

.Visible = True

.Navigate ("https://192.168.1.1/cgi-bin/tabFW.html?tabJson=../pages/network/wireless/tab.json&&tabIndex=0")

Do While .ReadyState <> 4

WScript.Sleep 1000

Loop

End With

WScript.Sleep 5000

IE2.document.getElementById("overridelink").Click

Do While IE2.ReadyState <> 4

WScript.Sleep 1000

Loop

WScript.Sleep 10000

SSIDDut=IE2.document.forms.general.textfield.Value

PSKDut = IE2.document.forms.general.PreSharedKey.Value

// If we want to pop out message like “msgbox”, we can use WScript.Echo

WScript.Echo SSIDDut

WScript.Echo PSKDut

// Close process named “iexplore.exe”

// It is the way to close IE

Set objWMIService = GetObject("winmgmts:{impersonationLevel=impersonate}!\\.\root\cimv2")

Set colProcessList = objWMIService.ExecQuery("Select \* from Win32\_Process Where Name = 'iexplore.exe'")

For Each objProcess in colProcessList

objProcess.Terminate()

Wait 5

Next

// Write Back

Set fso = CreateObject("Scripting.FileSystemObject")

Set f = fso.OpenTextFile("GUIResults.txt", 2, True)

f.Write "SSIDDut=" & SSIDDut & Chr(13) & Chr(10)

f.Write "PSKDut=" & PSKDut & Chr(13) & Chr(10)

f.close

# GUI Result 2

## Purpose

Resolve vbscript(GUI Result) can not control pop-out window.

## Method

1. AutoGenKey Script(.txt)
2. QTP Script(.mts) 🡸 QTP should open before running
3. GUI Script(.vbs)

## AutoGenKey Script

GUI\_Script|MarcopoloSpain.vbs 🡺 GUI\_Script|MarcopoloSpain.vbs|10 🡸 10 means waiting time

## QTP Script

1. Record GUI objects.
2. Login GUI and get elements.
3. Write Back

Write Back Example:

On Error Resume Next

Set fso = CreateObject("Scripting.FileSystemObject")

Set f = fso.OpenTextFile("…\PwdGenConfig\GUIResults.txt", 2, True)

f.Write "Login=" & Login & Chr(13) & Chr(10)

f.Write "SSIDChk=" & SSIDChk & Chr(13) & Chr(10)

f.Write "TR69PwdChk=" & TR69PwdChk & Chr(13) & Chr(10)

f.close

## GUI Script

Dim qtApp

Dim qtTest

Dim qtResultsOpt

Set qtApp = CreateObject("QuickTest.Application")

*‘qtApp.Launch* 🡸 Block at each run

qtApp.Visible = True

qtApp.Options.Run.ImageCaptureForTestResults = "OnError"

qtApp.Options.Run.RunMode = "Fast"

qtApp.Options.Run.ViewResults = False

qtApp.Open "D:\Get\_GUI\_PSK", True 🡸 Call QTP Script

Set qtTest = qtApp.Test

qtTest.Settings.Run.IterationMode = "rngIterations" ' Run only iterations 2 to 4

qtTest.Settings.Run.StartIteration = 2

qtTest.Settings.Run.EndIteration = 4

qtTest.Settings.Run.OnError = "NextStep"

Set qtResultsOpt = CreateObject("QuickTest.RunResultsOptions")

qtResultsOpt.ResultsLocation = ""

qtTest.Run qtResultsOpt

WScript.Sleep 5000