**SendKeys Method**  
  
SendKeys method are used to perform a keyboard operation. There are various instances when you require to use them e.g. sometimes objects perform actions when certain key is being pressed like ALT+SHIFT or ALT+RETURN or ENTER or TAB keys.  
  
How to use the Windows Scripting SendKeys method-  
  
1. Create a WScript.Shell object.  
2. Activate the browser/Window in which you want to press the keys.  
3. Use the SendKeys method to type the key combination.  
  
**Example:**  
  
'This code Activates the window, type the ID and Password and then click on Enter button-  
Set WshShell  = CreateObject ("WScript.Shell")  
WshShell.AppActivate("Google")  
wait(2)  
  
'Input's the user ID and press TAB key  
WshShell.SendKeys(userId)  
WshShell.SendKeys("{TAB}")  
  
'Inputs the password and press TAB key  
WshShell.SendKeys(password)  
WshShell.SendKeys("{TAB}")  
  
'Press the Enter Key  
WshShell.SendKeys("~")  
'Releasing the object  
Set WshShell  =Nothing  
  
**Keys along with Codes that can be used using SendKeys method-**

|  |  |
| --- | --- |
| **Key** | **Code** |
| BACKSPACE | {BACKSPACE}, {BS}, or {BKSP} |
| BREAK | {BREAK} |
| CAPS LOCK | {CAPSLOCK} |
| DEL or DELETE | {DELETE} or {DEL} |
| DOWN ARROW | {DOWN} |
| END | {END} |
| ENTER | {ENTER}or ~ |
| ESC | {ESC} |
| HELP | {HELP} |
| HOME | {HOME} |
| INS or INSERT | {INSERT} or {INS} |
| LEFT ARROW | {LEFT} |
| NUM LOCK | {NUMLOCK} |
| PAGE DOWN | {PGDN} |
| PAGE UP | {PGUP} |
| PRINT SCREEN | {PRTSC} |
| RIGHT ARROW | {RIGHT} |
| SCROLL LOCK | {SCROLLLOCK} |
| TAB | {TAB} |
| UP ARROW | {UP} |
| F1 | {F1} |
| F2 | {F2} |
| F3 | {F3} |
| F4 | {F4} |
| F5 | {F5} |
| F6 | {F6} |
| F7 | {F7} |
| F8 | {F8} |
| F9 | {F9} |
| F10 | {F10} |
| F11 | {F11} |
| F12 | {F12} |
| F13 | {F13} |
| F14 | {F14} |
| F15 | {F15} |
| F16 | {F16} |

To specify keys combined with any combination of the SHIFT, CTRL, and ALT keys, precede the key code with one or more of the following codes:

|  |  |
| --- | --- |
| **Key** | **Code** |
| SHIFT | + |
| CTRL | ^ |
| ALT | % |

To specify that any combination of SHIFT, CTRL, and ALT should be held down while several other keys are pressed, enclose the code for those keys in parentheses. For example, to specify to hold down SHIFT while E and C are pressed, use "+(EC)". To specify to hold down SHIFT while E is pressed, followed by C without SHIFT, use "+EC".  
To specify repeating keys, use the form {key number}. You must put a space between key and number. For example, {LEFT 42} means press the LEFT ARROW key 42 times; {h 10} means press H 10 times.

We use SendKeys method to send keyboard input/keystrokes to applications that do not have automation interface. We can also send more than one keystroke at a time using Sendkeys method. To send keystrokes x,y and z, you would send the string argument "xyz".  
  
**Note**: You cannot send Print Screen key to an application.

**DeviceReplay Method**  
The Device Replay feature is used to perform mouse and keyboard actions against screen coordinates that are provided. The Device Replay functions are not automatically recorded, but must be programmed manually in the Expert View.   
  
1. Create the Device Replay Object.  
Set DeviceReplay = CreateObject(“Mercury.DeviceReplay”)  
  
2. Call the desired Device Replay function.  
DeviceReplay.SendString(“Hello, World”)  
  
3. When done with the Device Replay object, release it.  
Set DeviceReplay = Nothing  
  
**The Mouse functions that can be used with the Device Replay object are (all coordinates are relative to the top left corner of the screen):**

|  |  |
| --- | --- |
| **Function** | **Description** |
| MouseMove *x, y* | Move the mouse to the screen coordinate (x,y). |
| MouseClick *x, y, button* | Move the mouse to the screen coordinate (x,y) and click the button (0=left; 1=middle; 2=right). |
| MouseDblClick *x, y, button* | Move the mouse to the screen coordinate (x,y) and double-click the button (0=left; 1=middle; 2=right). |
| DragAndDrop *x, y, dropx, dropy, button* | Drag the mouse from screen coordinate (x,y) to (dropx,dropy) with the button (0=left; 1=middle; 2=right) pressed. |
| PressKey *key* | Press a key using the ASCII code of the key. For example, Chr(13), vbCR and vbTab. |
| MouseDown *x, y, button* | Press the mouse button on screen coordinate (x,y). |
| MouseUp *x, y, button* | Release the mouse button on screen coordinate (x,y). |
| KeyDown *key* | Press a key using the ASCII code of the key. For example, Chr(13), vbCR and vbTab. |
| KeyUp *key* | Release a key using the ASCII code of the key. For example, Chr(13), vbCR and vbTab. |
| SendString *string* | Type a string |

Mercury DeviceReplay is a powerful utility to simulate keyboard input and also for simulating mouse clicks and movements. At times, Object.Set and Object.Type does not help in QTP for some applications. You can use Mercury DeviceReplay to type Non English symbols and letters even without changing the keyboard layout or installing the special fonts.  
  
**Example-**  
  
'Creating Wscript Shell and Device Replay objects

Set WshShell = CreateObject("WScript.Shell")

Set obj = CreateObject("mercury.devicereplay")

x=Page("Page").WebEdit("xyz").GetROProperty ("abs\_x")

y=Page("Page").WebEdit("xyz").GetROProperty ("abs\_y")

'Clicking Left Mouse button

obj.MouseClick x, y, 1

'Pressing Enter key

WshShell.sendKeys "{ENTER}"

'Releasing the objects

Set obj=Nothing

Set WshShell=Nothing