



SELENIUM – SWITCH COMMANDS

Lecture Notes

A COMPLETE GUIDE FOR
BEGINNERS

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Selenium – Switch Commands

Some web applications have many frames or multiple windows. Selenium WebDriver assigns an alphanumeric id to each window as soon as the WebDriver object is instantiated. This unique alphanumeric id is called **window handle**. Selenium uses this unique **id** to switch control among several windows. In simple terms, each unique window has a unique ID, so that Selenium can differentiate when it is switching controls from one window to the other.

GetWindowHandle Command

Purpose: To get the **window handle** of the current window.

```
//Return a string of alphanumeric window handle
String handle= driver.getWindowHandle();
```

GetWindowHandles Command

Purpose: To get the **window handle** of **all** the current windows.

```
//Return a set of window handle
Set<String> handle= driver.getWindowHandles();
```

Or

Alternatively, you can pass a “**window handle**” to the “switchTo().window()” method. Knowing this, it’s possible to iterate over every open window like so:

```
for (String handle : driver.getWindowHandles()) {
    driver.switchTo().window(handle);
}
```

Or

Switching between windows with **Iterators**:

```
driver.findElement(By.id("id of the link which opens new window")).click();
//wait till two windows are not opened
waitForNumberOfWindowsToEqual(2); //this method is for wait
Set handles = driver.getWindowHandles();
firstWinHandle = driver.getWindowHandle(); handles.remove(firstWinHandle);
String winHandle=handles.iterator().next();
if (winHandle!=firstWinHandle){
    //To retrieve the handle of second window, extracting the handle which does not match to first
    window handle
    secondWinHandle=winHandle; //Storing handle of second window handle
    //Switch control to new window
    driver.switchTo().window(secondWinHandle);
```

SwitchTo Frame Command

Purpose: WebDriver supports moving between named frames using the “*switchTo*” method.

```
driver.switchTo().frame("frameName");
```

SwitchTo Popup Command

Purpose: WebDriver supports moving between named PopUps using the “*switchTo*” method. After you’ve triggered an action that opens a popup, you can access the **alert** and it will return the currently open alert object. With this object you can now **accept**, **dismiss**, **read** its contents or even type into a prompt. This interface works equally well on alerts, confirms, and prompts.

```
Alert alert = driver.switchTo().alert();
```

Practice Exercise 1

- 1) Launch new Browser
- 2) Open URL “<http://softechsolutionsgroup.com/automation-practice/switch-windows.html>”
- 3) Get Window name (Use GetWindowHandle command)
- 4) Click on Button “New Message Window”, it will open a Pop Up Window
- 5) Get all the Windows name (Use GetWindowHandles command)
- 6) Close the Pop Up Window (Use Switch Command to shift window)

Practice Exercise 2

- 1) Launch new Browser
- 2) Open URL “<http://softechsolutionsgroup.com/automation-practice/switch-windows.html>”
- 3) Click on Button “Alert Box”, it will open a Pop Up Window generated by JavaScript
- 4) Switch to Alert window (Use ‘SwitchTo()Alert() command)
- 5) Close the Pop Up Window (Use Accept command)