

# Telerik Function Library



This Document contains information about using the function libraries created for reusability of common features required in Automation. These features are not inbuilt the Test Studio.

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V 2.7

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## Version Control

V 1.0

### *Functions Created:*

- DataFromExcel
- DataToExcel
- RowColCount
- MsgBox

V 1.1

### *Functions Created:*

- ClickFromTableByText

### *Changes made:*

- *MsgBox() made static*
- *DataToExcel() made static*

V 2.0

### *Functions Created:*

- FindTextInTable

### *Changes made:*

- *DataFromExcel() made static*
- *DataToExcel() made static*
- *RowColCount() broken into RowCount() and ColCount()*
- *Class structure removed and all functions are under Func class*

V 2.1

### *Changes made:*

- *Corrected FindTextInTable() function.*

V2.2

### *Functions Created*

- ClickFromTableByText (Override created to double click or right click or single click and scroll to row if opted)

### *Changes Made:*

- ClickFromTableByText() edited to handle more types of tables and scroll to the element on which its clicking.
- FindTextInTable() edited to handle more types of tables.

V2.3

### *Functions Created*

- KeyAction()

### *Changes Made*

- Table functions handle more table types

V2.4

### *Functions Created*

- GetDataFromTableByText()

### *Changes Made*

- Added Prerequisites
- Added steps to make the dll available for scripts running on remote system

V2.5

### *Functions Created*

- DataToTxt()
- DataFromTxt()

V2.6

### *Functions Created*

- `getCSVrowCount()`
- `getCSVcolCount()`
- `getCSVdata()`
- `setCSVdata()`
- `CellFromTableByText()`

### *Changes Made:*

- *Added custom exceptions to few functions*

V2.7

### *Functions Created*

- `DataFromExcel (Override)`
- `DataToExcel (Override)`
- `RowCount (Override)`
- `ColCount (Override)`

### *Changes Made:*

- *Excel Functions can now handle sheets with any number of columns. It was restricted to 26 columns previously*

## Contents

Version Control .....	1
How to Use .....	5
Prerequisites .....	5
CustomFunc.dll.....	6
DataFromExcel() .....	7
DataToExcel() .....	8
RowCount() .....	9
ColCount() .....	9
MsgBox() .....	10
ClickFromTableByText().....	11
ClickFromTableByText() (Override) .....	11
FindTextInTable() .....	11
KeyAction() .....	12
GetDataFromTableBytext() .....	12
DataToTxt().....	13
DataFromTxt() .....	13
getCSVrowCount().....	14
getCSVcolCount() .....	14
getCSVdata().....	14
setCSVdata() .....	15

## How to Use

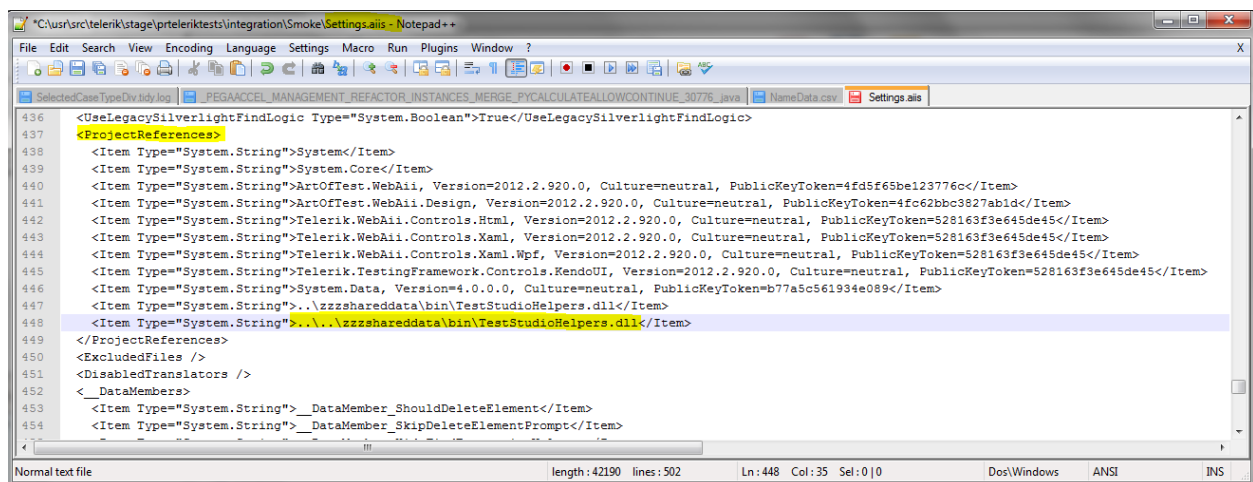
- Add reference to the dll in the project explorer. Please refer following link to know how to associate dll to the project.

[http://www.telerik.com/automated-testing-tools/support/documentation/user-guide/coded\\_steps/add-an-assembly-reference.aspx](http://www.telerik.com/automated-testing-tools/support/documentation/user-guide/coded_steps/add-an-assembly-reference.aspx)

- Add a Script Step in the test where you want us custom function.
- Click on show class and add the reference to the library- "Using CustomFunc;"
- For Static Functions, no need to instantiate

<classname>.<functionname>(Parameters);

- Note: since Version 2.0, the class name for all functions have been made to Func.
- To use this dll while running tests on remote systems, add a reference In the test settings as follows:
  - From Windows Explorer, open your project settings file.
  - Find the ProjectReferences section, make a copy of the TestStudioHelpers reference, then prefix the reference with "..\\".



## Prerequisites

- .net version 4.5 or above
- Telerik version 2012.2.1204.0 or above.

## CustomFunc.dll

- DataFromExcel +1 override
  - Get Data from a cell in excel
- DataToExcel +1 override
  - Write data to cell in excel
- RowCount +1 override
  - Get the count of used rows in Excel
- ColCount +1 override
  - Get the count of used columns in Excel
- MsgBox
  - Display a msgbox with data for debugging
- ClickFromTableByText +1override
  - Finds a text in a table and clicks on a specified column for that row
- FindTextInTable
  - Finds a text in a table
- KeyAction
  - Simulates object independent keyboard input
- GetDataFromTableByText
  - Gets data from a defined column in a table from a row where the search string is found
- DataToTxt
  - Saves string to a text file in system.
- DataFromText
  - Gets data from a text file in system.
- getCSVrowCount()
  - Returns the number of active rows in CSV file.
- getCSVcolCount()
  - Returns the number of active columns in CSV file.
- getCSVdata()
  - Returns data from a row column intersection in CSV file.
- setCSVdata()
  - Replaces a cell data in csv or adds a new row if the row number exceeds total rows.
- CellFromTableByText()
  - Returns the HtmlCell object located in the row with the desired text in it and the specified column. This cell can be used further for different actions.

## DataFromExcel()

### *Syntax*

*String* DataFromExcel(String filePath, int Col, int Row, String sheetName, Boolean Visible)

### *Return*

Returns a string value of the cell at row and column given in the arguments.

### *Arguments*

**Filepath:** Enter the complete file path. Eg- "C:\\My.xls".

**Col:** Enter the Numeric value of Column. Restricted till 24 i.e Col Z.

**Row:** Enter the numeric value of Row.

**Sheetname:** Enter the name of the sheet as string. Eg- "Sheet1".

**Visible :** Enter true if you want to see the excel while execution, else enter false

## DataFromExcel() (Override)

### *Syntax*

*String* DataFromExcel(String filePath, int Col, int Row, String sheetName, ExecutionContext Context)

### *Return*

Returns a string value of the cell at row and column given in the arguments.

### *Arguments*

**Filepath:** Enter path relative to execution directory. Eg- "Data\\My.xls".

**Col:** Enter the Numeric value of Column. Restricted till 24 i.e Col Z.

**Row:** Enter the numeric value of Row.

**Sheetname:** Enter the name of the sheet as string. Eg- "Sheet1".

**Context :** Just type 'ExecutionContext' without quotes.



## DataToExcel()

### Syntax

`void DataFromExcel(String filePath, int Col, int Row, String sheetName, Boolean Visible, String Data)`

### Return

No Return.

### Arguments

**Filepath:** Enter the complete file path. Eg- "C:\\My.xls".

**Col:** Enter the Numeric value of Column. Restricted till 24 i.e Col Z.

**Row:** Enter the numeric value of Row.

**Sheetname:** Enter the name of the sheet as string. Eg- "Sheet1".

**Visible :** Enter true if you want to see the excel while execution, else enter false

**Data:** Enter the data you want to write to excel

## DataToExcel() (Override)

### Syntax

`void DataFromExcel(String filePath, int Col, int Row, String sheetName, ExecutionContext Context, String Data)`

### Return

No Return.

### Arguments

**Filepath:** Enter path relative to execution directory. Eg- "Data\\My.xls".

**Col:** Enter the Numeric value of Column. Restricted till 24 i.e Col Z.

**Row:** Enter the numeric value of Row.

**Sheetname:** Enter the name of the sheet as string. Eg- "Sheet1".

**Context :** Just type 'ExecutionContext' without quotes.

**Data:** Enter the data you want to write to excel

## RowCount()

### *Syntax*

```
int RowCount(String filePath, String sheetName)
```

### *Return*

Returns the rowcount as integer.

### *Arguments*

**Filepath:** Enter the complete file path. Eg- "C:\\My.xls".

**Sheetname:** Enter the name of the sheet as string. Eg- "Sheet1".

## RowCount() (Override)

### *Syntax*

```
int RowCount(String filePath, String sheetName, ExecutionContext Context)
```

### *Return*

Returns the rowcount as integer.

### *Arguments*

**Filepath:** Enter path relative to execution directory. Eg- "Data\\My.xls".

**Sheetname:** Enter the name of the sheet as string. Eg- "Sheet1".

**Context:** Just type 'ExecutionContext' without quotes.

## ColCount()

### *Syntax*

```
int ColCount(String filePath, String sheetName)
```

### *Return*

Returns Column count as an integer.

### *Arguments*

**Filepath:** Enter the complete file path. Eg- "C:\\My.xls".

**Sheetname:** Enter the name of the sheet as string. Eg- "Sheet1".

## ColCount() (Override)

### *Syntax*

```
int ColCount(String filePath, String sheetName, ExecutionContext Context)
```

### *Return*

Returns Column count as an integer.

### *Arguments*

**Filepath:** Enter path relative to execution directory. Eg- "Data\\My.xls".

**Sheetname:** Enter the name of the sheet as string. Eg- "Sheet1".

**Context:** Just type 'ExecutionContext' without quotes

## MsgBox()

### *Syntax*

```
Void MsgBox(String message)
```

### *Return*

No return.

### *Arguments*

**message:** Enter the message you want to display

## ClickFromTableByText()

### Syntax

*boolean ClickFromTableByText(Htmltable table, String text, int column)*

### Return

Boolean true if the value was found and click was done, else false.

### Arguments

**table:** Pass the Htmltable object under consideration

**text:** Pass the string you are looking for in the table

**column:** Pass the column number of the table which has the button

## ClickFromTableByText() (Override)

### Syntax

*boolean ClickFromTableByText(Htmltable table, String text, int column, string click, Boolean scroll)*

### Return

Boolean true if the value was found and click was done, else false.

### Arguments

**table:** Pass the Htmltable object under consideration

**text:** Pass the string you are looking for in the table

**column:** Pass the column number of the table which has the button

**click:** Enter string "Double" for double clicking, "Single" for single left click, "Right" for single right click

**scroll:** Enter true if you want to scroll to the required element else enter false

## FindTextInTable()

### *Syntax*

*boolean FindTextInTable(Htmltable table, String text)*

### *Return*

Boolean true if the value was found and click was done, else false.

### *Arguments*

**table:** Pass the Htmltable object under consideration

**text:** Pass the string you are looking for in the table

## **KeyAction()**

### *Syntax*

*static void KeyAction(String Key)*

### *Return*

None

### *Arguments*

**Key:** Pass String name of the key to be pressed

Down Arrow-“Down”

Up Arrow-“UP”

Right Arrow-“Right”

Left Arrow-“Left”

Enter-“Enter”

Escape-“Esc”

## **GetDataFromTableByText()**

### *Syntax*

Static String GetDataFromTableByText(HtmlTable table, String Text, int Column)

### *Return*

String value of the data at the required cell.

### *Arguments*

**Table:** HtmlTable object as per the Telerik Element explorer

**Text:** The search string to find correct row.

**Column:** the column number from where the return string is required

## DataToTxt()

### *Syntax*

```
public static void DataToTxt(String filePath,String Data)
```

### *Return*

None

### *Arguments*

**Filepath:** Enter the complete file path. Eg- "C:\\My.txt".

**Data:** Enter the data you want to write to text file.

## DataFromTxt()

### *Syntax*

```
public static String DataFromTxt(String filePath)
```

### *Return*

String value of the data in text file.

### *Arguments*

**Filepath:** Enter the complete file path. Eg- "C:\\My.txt".

## getCSVrowCount()

### *Syntax*

```
public static int getCSVrowCount(String filename)
```

### *Return*

Integer Value of the number of rows in CSV file.

### *Arguments*

**filename:** Enter the complete file path. Eg- "C:\\My.csv".

## getCSVcolCount()

### *Syntax*

```
public static int getCSVcolCount(String filename)
```

### *Return*

Integer Value of the number of columns in CSV file.

### *Arguments*

**filename:** Enter the complete file path. Eg- "C:\\My.csv".

## getCSVdata()

### *Syntax*

```
public static String getCSVdata(String filename, int rownum, int colnum, char delimiter)
```

### *Return*

String value present at the row-col intersection in CSV file.

### *Arguments*

**filename:** Enter the complete file path. Eg- "C:\\My.txt".

**rownum:** Enter the row number where you want the data from.

**colnum:** Enter the column number where you want the data from.

**delimiter:** Enter the delimiting character for the file like ','.

## setCSVdata()

### *Syntax*

```
public static void setCSVdata(String filename, int rownum, int colnum,String data, char delimiter)
```

### *Return*

String value present at the row-col intersection in CSV file.

### *Arguments*

**filename:** Enter the complete file path. Eg- "C:\\My.txt".

**rownum:** Enter the row number where you want the data from.

**colnum:** Enter the column number where you want the data from.

**data:**String data to be entered to CSV file.

**delimiter:** Enter the delimiting character for the file like ','.

## CellFromTableByText()

### *Syntax*

```
HtmlTableCell CellFromTableByText(Htmltable table, String text, int column)
```

### *Return*

The Cell in the first row with the given text with the specified column.

### *Arguments*

**table:** Pass the Htmltable object under consideration

**text:** Pass the string you are looking for in the table

**column:** Pass the column number of the table which has the button