# Introduction

This document describes the way a Microsoft Excel 2010 can be integrated in Uniface 9.6.

# Documentation

We created this document using the world wide web in particular the following resources :

<http://www.vogella.com/tutorials/JavaExcel/article.html>

<http://social.msdn.microsoft.com/Forums/office/en-US/0508ead3-5ff0-436c-8f00-5fece289d625/wheres-excel-2010-object-model-diagram>

<http://msdn.microsoft.com/en-us/library/wss56bz7%28v=vs.100%29.aspx>

<http://www.rondebruin.nl/win/s5/win001.htm>

<http://unifaceinfo.com/forum/unifaceintegrations/integrating-msexcel-2010/>

<http://msdn.microsoft.com/en-us/library/cc704587.aspx>

# Special thanks to

Daniel Iseli and Uli Merkel for supplying me with additional information.

# Generate the signatures

/sti /mwr=COM /pid Excel.Application

# My first application

Consider the following uniface trigger code:

variables

handle v\_msexcel

boolean v\_isvisible

endvariables

; first create a new excel object

newinstance "APPLICATION", v\_msexcel

; get the visibillity

activate v\_msexcel->"GET\_VISIBLE"(v\_isvisible)

; make it visible

if (!v\_isvisible)

activate v\_msexcel->"SET\_VISIBLE"(1)

endif

; create a new document

deleteinstance v\_msexcel

We defined two variables. One is a handle that will contain the signature reference. The second is a Boolean that will hold the visibility parameter of the excel application. By default the setting is false not showing the application on screen.

Using the operation GET\_VISIBLE retrieves the value from the Excel application. If it returns false than we make it visible using the SET\_VISIBLE operation, parsing true towards Excel. This will result in an excel application being visible on your screen.

Finally we terminate the application using deleteinstance.

# Creating a new workbook

When we want to create a new workbook in the application we use the signature WORKBOOKS. The operation ADD in the signature has two parameters. The first one is a reference to a created WORKBOOK and the second is the name of a template you would like to use. In our example we will leave the second one empty.

The code looks like this:

; get the workbooks from the active application

activate v\_msexcel->"GET\_WORKBOOKS"(v\_workbooks)

; create a new workbook

activate v\_workbooks->"ADD"(v\_workbook, "")

To retrieve the workbooks object from the active application we execute the GET\_WORKBOOKS operation that returns a handle to the workbooks object in the excel application. After activating the ADD operation in the workbooks object and parsing an empty string for a template name we receive a handle to the v-workbook object.

# Save a file

|  |  |  |
| --- | --- | --- |
| **Number** | **Filetype** | **Description** |
| 6 | Csv | Comma seperated |
| 50 | Xlsb |  |
| 51 | Xlsx |  |
| 52 | Xlsm |  |
| 56 | Xls |  |
| -4158 | Txt |  |
| 36 | Prn |  |

# SaveAccessMode

|  |  |  |
| --- | --- | --- |
|  |  |  |
| 1 | **xlNoChange** | Default (does not change the access mode) |
| 2 | **xlShared** | Share list |
| 3 | **xlExclusive** | Exclusive mode |

# Write something in a cell

# Start the application

After generating the signatures in your environment the signature containing access to the EXCEL.Exe in your windows environment van be found in the signature named APPLICATION.

# End the application

Note: It is possible to mark a parameter of a COM Call-Out operation as optional by specifying a hyphen (-) or the string "UT\_OPTIONAL" (see example below):

vWorkBooksv->Open("UT\_OPTIONAL", FileName, -, -, -, -, -, -, -, -, -, -, -, -, -, -)

Found on http://msdn.microsoft.com/en-us/library/office/ff838238%28v=office.15%29.aspx

Although you could use Visual Basic string functions to alter A1-style references, it is easier (and better programming practice) to use the Cells(1, 1) notation.

RANGE->GET\_ADDRESS

If you see R1K1 when executing GET\_ADDRESS look at this :

<http://support.microsoft.com/kb/269866/nl> for 2007 users

<http://www.pcleek.com/ms-office-tips/723-excel-2007-2010-verwijzingstype-naar-rijen-en-kolommen-wijzigen>

for 2007 and 2010 users