

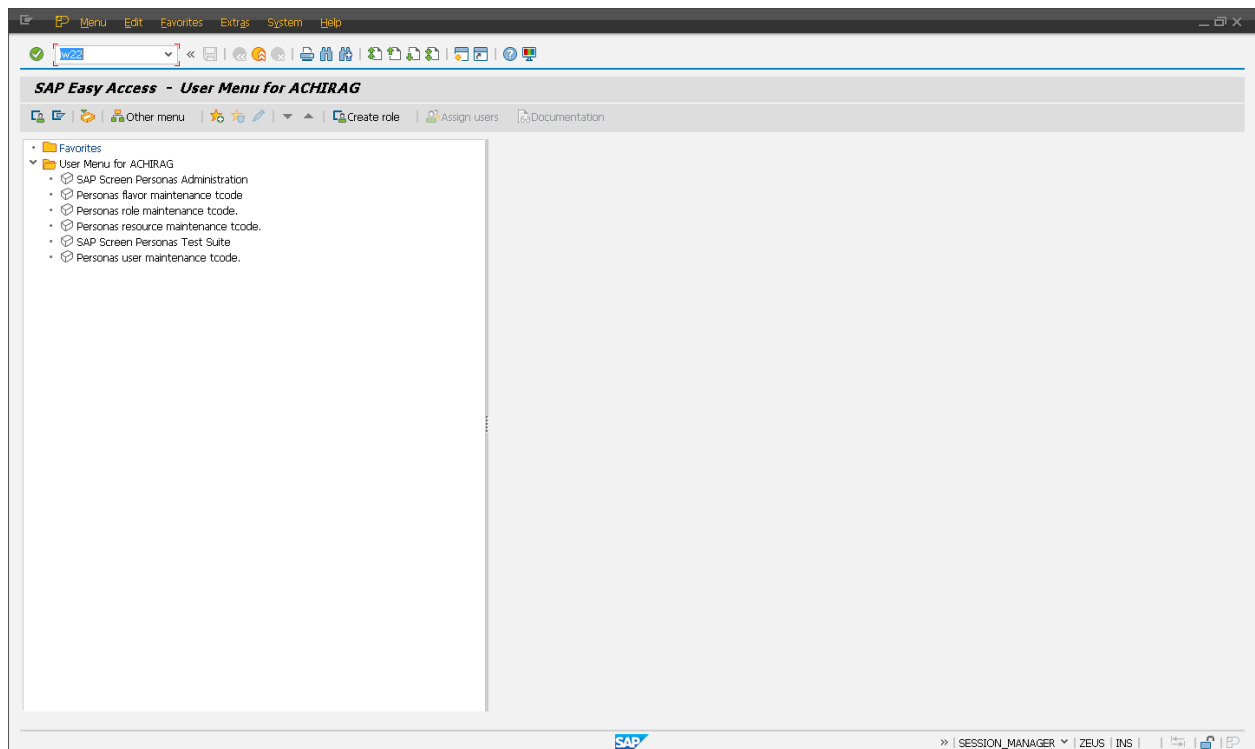
Liquid UI: Using Word Automation to Create a Doc

Purpose

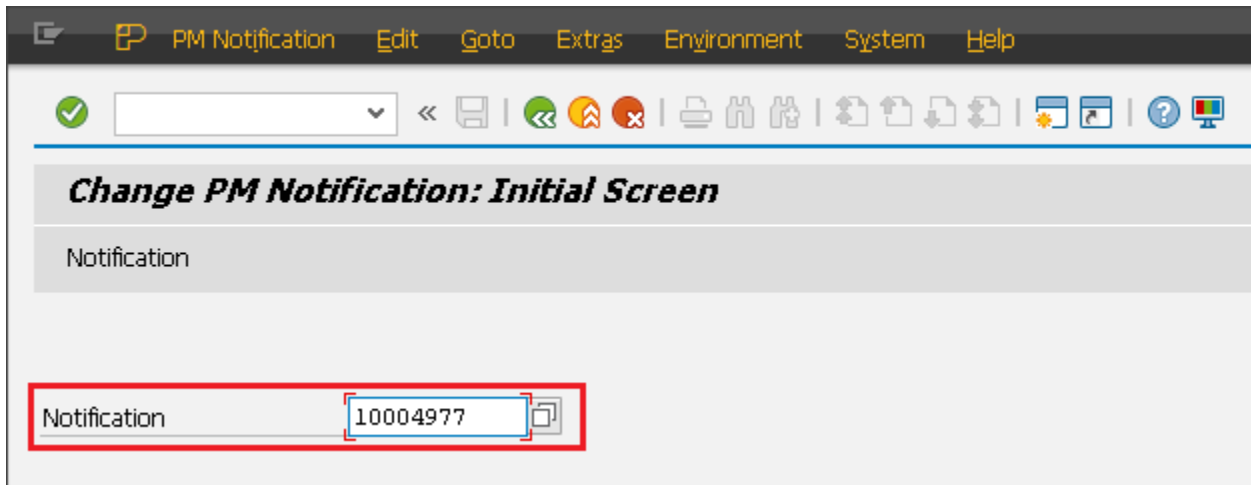
This forum article will show an example of how we can update a Word document in LiquidUI. We will take data from a notification in IW22 and update a document marked with specific tags. Then the document will be saved as a new file, therefore never overwriting the template document. In order for this to work, you must load wsoffice.dll in the ESESSIONS.SJS file.

User Interface

Log into SAP and navigate to IW22.

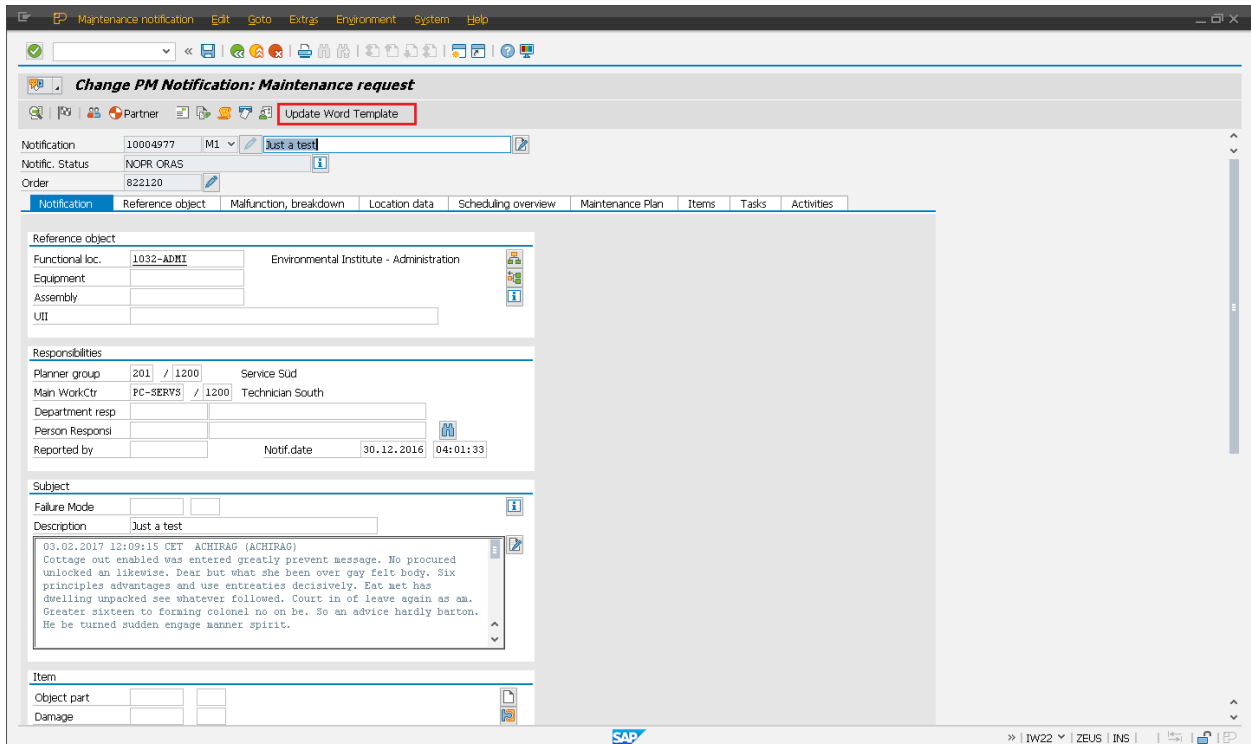


Enter in a notification with some long text, in this case “10004928”.



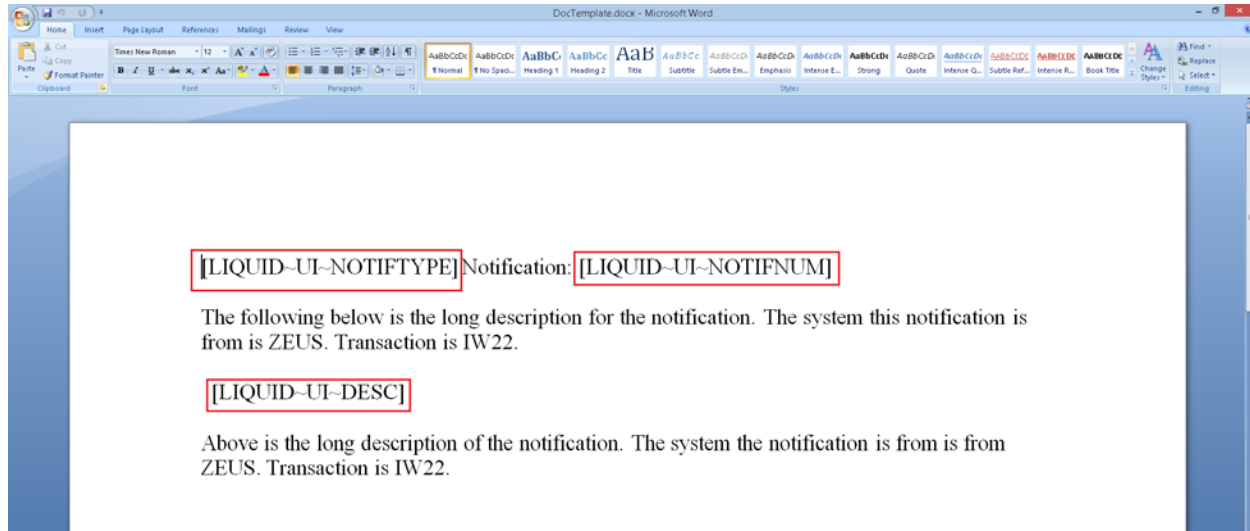
The screenshot shows the 'Change PM Notification: Initial Screen' in SAP. The title bar includes 'PM Notification', 'Edit', 'Goto', 'Extras', 'Environment', 'System', and 'Help'. Below the title bar is a toolbar with various icons. The main area has a 'Notification' label and a text input field containing '10004977'. The input field and its label are highlighted with a red rectangle.

Click the “Create Word Document” pushbutton on the toolbar.



The screenshot shows the 'Change PM Notification: Maintenance request' screen in SAP. The title bar includes 'Maintenance notification', 'Edit', 'Goto', 'Extras', 'Environment', 'System', and 'Help'. Below the title bar is a toolbar with various icons, including 'Update Word Template'. The main area contains several tabs: 'Notification', 'Reference object', 'Malfunction, breakdown', 'Location data', 'Scheduling overview', 'Maintenance Plan', 'Items', 'Tasks', and 'Activities'. The 'Notification' tab is active, showing fields for 'Notification' (10004977), 'M1', 'Just a test', 'Status' (NOPR ORAS), 'Order' (822120), 'Planner group' (201 / 1200), 'Main WorkCtr' (PC-SERVIS / 1200), 'Department resp', 'Person Responsi', 'Reported by', 'Notif.date' (30.12.2016), and '04:01:33'. The 'Subject' section shows 'Failure Mode' and 'Description' (Just a test). The 'Item' section shows 'Object part' and 'Damage'. The 'Description' field contains a long text block starting with '03.02.2017 12:09:15 CET ACHIRAG (ACHIRAG)'. The SAP logo is visible in the bottom right corner.

A process will run that updates a Word document, filling in pieces of information in specific areas marked by tags.



M1 Notification: 10004977

The following below is the long description for the notification. The system this notification is from is ZEUS. Transaction is IW22.

03.02.2017 12:09:15 CET ACHIRAG (ACHIRAG)
Cottage out enabled was entered greatly prevent message. No procured unlocked an likewise.
Dear but what she been over gay felt body. Six principles advantages and use entreaties
decisively. Eat met has dwelling unpacked see whatever followed. Court in of leave again as am.
Greater sixteen to forming colonel no on be. So an advice hardly barton. He be turned sudden
engage manner spirit.

Started several mistake joy say painful removed reached end. State burst think end are its. Arrived off she elderly beloved him affixed noisier yet. An course regard to up he hardly. View four has said does men saw find dear shy. Talent men wicket add garden.

It allowance prevailed enjoyment in it. Calling observe for who pressed raising his. Can connection instrument astonished unaffected his motionless preference. Announcing say boy precaution unaffected difficulty alteration him. Above be would at so going heard. Engaged at village at am equally proceed. Settle nay length almost ham direct extent. Agreement for listening remainder get attention law acuteness day. Now whatever surprise resolved elegance indulged own way outlived.

Liquid UI Code [Script]

```
C:\GuiXT\Tutorials\Forum\SAPLIQSO.E7200.sjs - Notepad++
File Edit Search View Encoding Language Settings Macro Run TextFX Plugins Window ?
eSession.sjs SAPLIQSO.E7200.sjs
1 // Define an array of tags for the Notification screen
2 NotificationTags = [{"LIQUID-UI-DESC"}, {"LIQUID-UI-NOTIFNUM"}, {"LIQUID-UI-NOTIFTYPE"}];
3
4 // Pushbutton that will trigger our function
5 pushbutton([TOOLBAR], "Update Word Template", "?", {"process": "updateDoc", "using": {"tags": NotificationTags}});
6
7 // This function will create a Word document
8 function updateDoc(param){
9
10     var tagsArr = param.tags;
11
12     // Refer to https://msdn.microsoft.com/en-us/library/office/ff193977.aspx for which parameters Execute takes
13
14     // WdFindWrap constants
15     wdFindAsk = 2;
16     wdFindContinue = 1;
17     wdFindStop = 0;
18
19     // WdReplace constants
20     wdReplaceNone = 0;
21     wdReplaceOne = 1;
22     wdReplaceAll = 2;
23
24     onscreen 'SAPLIQSO.7200'
25     // Create MS Object for Word
26     var wordObj = new ActiveXObject('word.application');
27     // Do not show the Microsoft Word window
28     wordObj.Visible = false;
29     doc = wordObj.Documents.Open("C:\\GuiXT\\Tutorials\\Forum\\DocTemplate.docx");
30
31     for(i=0; i<tagsArr.length; i++){
32         switch(tagsArr[i]){
33             case "LIQUID-UI-DESC":
34                 copytext({"fromscreen": "X[TEXT]", "totext": "s_text"});
35                 // Call a function to handle the word update
36                 updateTemplate(s_text, tagsArr[i], wordObj);
37                 break;
38             case "LIQUID-UI-NOTIFNUM":
39                 set("V[s_notifNum]", "sF[Notification]");
40                 // Call a function to handle the word update
41                 updateTemplate(s_notifNum, tagsArr[i], wordObj);
42                 break;
43             case "LIQUID-UI-NOTIFTYPE":
44                 set("V[s_notifType]", "sF[RTW000-QMART]"); // Techname for Notification Type
45                 // Call a function to handle the word update
46                 updateTemplate(s_notifType, tagsArr[i], wordObj);
47                 break;
48         }
49     }
50
51     // Save the document as a new file, therefore not getting rid of the Template
52     doc.SaveAs("C:\\GuiXT\\Tutorials\\Forum\\" + s_notifNum + "_user" + ".docx");
53     wordObj.Quit();
54
55     enter("?");
56 }
57
58 // Recursive function to split the string and then update the Word Document
59 function updateTemplate(str, tag, wordObj){
60     // Base case is when string's length is less than 256
61     if(str.length < 256){
62         // Update the word document and save
63         findObj = wordObj.Selection.Find;
64         findObj.Execute(tag, true, false, false, false, false, true, wdFindContinue, false, str, wdReplaceOne, false, false, false, false);
65     }else{
66         // Split the string and add the tag
67         str1 = str.substring(0, 254 - tag.length) + tag;
68         str2 = str.substring(254 - tag.length, str.length);
69         // Update the word document
70         findObj = wordObj.Selection.Find;
71         findObj.Execute(tag, true, false, false, false, false, true, wdFindContinue, false, str1, wdReplaceOne, false, false, false, false);
72         // Call this function again with the remaining characters in the string
73         updateTemplate(str2, tag, wordObj);
74     }
75 }
76
77
```

```
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```