

# Liquid UI: Update Resizable SAP Multiple Item Fields Dynamically

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## Purpose

To update SAP multiple Item fields dynamically based on re-sized screen display. The number of rows would vary based on the screen size and the script should update based on displayed SAP rows and then click on new items to populate the next set.

## User Interface

Log into SAP and on the SAP Easy Access Screen you will see the Liquid UI layout. Enter the data and click on 'Update – MB1A' toolbar pushbutton.

**SAP Easy Access**

 Update - MB1A

Document Date☒

Posting Date☒

Movement Type☒

Plant☒

Storage Location☒

Cost Center☒

Item	Material	Quantity
1		
2		
3		
4		
5		
6		
7		
8		
9		

## Liquid UI Code [Script]

### User Interface file –

```
SAPLSMTR_NAVIGATION.E0100.sjs
1 // Purpose: Function is called to remove blank spaces
2 String.prototype.trim=function(){return this.replace(/^\s+|\s+$/g,'');}
3
4 // Purpose: Function is called to validate if the variable holds blank or null value
5 function isBlank(jvar){
6     if(typeof jvar == 'string') {
7         jvar = jvar.trim();
8     }
9     return(jvar == 'undefined' || jvar == null || jvar == "" || jvar == void 0);
10 }
11
12 // Purpose: Function is called to update SAP multiple Item Fields Dynamically based on re-sized screen display
13 function mbla_update(){
14     var z_mbla_relrow = 1;
15     var z_mbla_absrow = 1;
16     var z_mbla_material_total_counter = 0;
17
18     if(isBlank(z_mbla_docdate)){
19         return('E: Enter Document Date');
20     }
21     if(isBlank(z_mbla_postdate)){
22         return('E: Enter Posting Date');
23     }
24     if(isBlank(z_mbla_mvmttype)){
25         return('E: Enter Movement Type');
26     }
27     if(isBlank(z_mbla_plant)){
28         return('E: Enter Plant');
29     }
30     if(isBlank(z_mbla_sloc)){
31         return('E: Enter Storage Location');
32     }
33     if(isBlank(z_mbla_costctr)){
34         return('E: Enter Cost Center');
35     }
36
37     // Below logic to check and validate Material and Quantity fields
38     for(var i=1;i<z_endrow;i++){
39         set('V[z_temp_mat]', '%V[z_mbla_material_%V[i]]');
40         set('V[z_temp_qty]', '%V[z_mbla_quantity_%V[i]]');
41         z_temp_mat = z_temp_mat.trim();
42         z_temp_qty = z_temp_qty.trim();
43
44         // Make Material required if Quantity is entered
45         if((isBlank(z_temp_mat)) && (!isBlank(z_temp_qty))){
46             return("E: Please enter Material for Item: "+i);
47         }
48
49         // Make Quantity required if Material is entered
50         if(!isBlank(z_temp_mat) && (isBlank(z_temp_qty))){
51             return("E: Please enter Quantity for Item: "+i);
```

```
SAPLSMTR_NAVIGATION.E0100.sjs
51     return("E: Please enter Quantity for Item: "+i);
52 }
53
54 //Increment the counter if material and quantity are not all filled
55 if(!isBlank(z_temp_mat) && (!isBlank(z_temp_qty))){
56     z_mbla_material_total_counter++;
57     continue;
58 }
59 }
60
61 onscreen 'SAPLSMTR_NAVIGATION.0100'
62     enter('/nMB1A');
63
64 onscreen 'SAPMM07M.0400'
65     set('F[Document Date]', '%V[z_mbla_docdate]');
66     set('F[Posting Date]', '%V[z_mbla_postdate]');
67     set('F[Movement Type]', '%V[z_mbla_mvmttype]');
68     set('F[Plant]', '%V[z_mbla_plant]');
69     set('F[Storage Location]', '%V[z_mbla_sloc]');
70     enter();
71     onerror
72         message(_message);
73         enter('/n');
74         goto SCRIPT_END;
75
76 onscreen 'SAPMM07M.0421'
77     set('F[Cost Center]', '%V[z_mbla_costctr]');
78     enter();
79     onerror
80         message(_message);
81         enter('/n');
82         goto SCRIPT_END;
83
84 NEW_ITEM;;
85 onscreen 'SAPMM07M.0421'
86     NEXT_MATERIAL;;
87     set('V[z_temp_mat]', '%V[z_mbla_material_&V[z_mbla_absrow]]');
88     set('V[z_temp_qty]', '%V[z_mbla_quantity_&V[z_mbla_absrow]]');
89
90     if(!isBlank(z_temp_mat)){
91         if(z_mbla_relrow == 1){
92             set('F[MSEG-MATNR]', '%V[z_temp_mat]'); // First material field
93             set('F[MSEG-ERFMG]', '%V[z_temp_qty]'); // First quantity field
94         } else{
95             set('V[z_mbla_cur_item_onscreen]', '%F[MSEG-MATNR.&V[z_mbla_relrow]]');
96             if(!isBlank(z_mbla_cur_item_onscreen)){
97                 set('F[MSEG-MATNR.&V[z_mbla_relrow]]', '%V[z_temp_mat]'); // Subsequent material fields - F[MSEG-MATNR.1]
98                 set('F[MSEG-ERFMG.&V[z_mbla_relrow]]', '%V[z_temp_qty]'); // Subsequent quantity fields - F[MSEG-ERFMG.1]
99             } else{
100                 goto ENTER_ON_SCREEN;
101             }
102         }
103     }
```

```
101         }
102     }
103     z_mbla_relrow++;
104     z_mbla_absrow++;
105     goto NEXT_MATERIAL;
106 } else{
107     ENTER_ON_SCREEN;;
108     if(z_mbla_relrow < 3){
109         set('V[z_mbla_last_item_onscreen]',"%F[MSEG-ZEILE]");
110     } else{
111         set('V[z_mbla_last_item_onscreen]',"%F[MSEG-ZEILE."+(z_mbla_relrow-1)+"]");
112     }
113 }
114 enter();
115 onerror
116     message(_message);
117     enter('/n');
118     goto SCRIPT_END;
119
120 NEXT_ITEM;;
121 onscreen 'SAPMM07M.0410'
122 REPEAT_ENTER;;
123 enter();
124 onmessage
125     if(_message.substring(0,2) == 'E:'){
126         message(_message);
127         enter('/n');
128         goto SCRIPT_END;
129     } else if(_message.substring(0,2) == 'W:'){
130         goto REPEAT_ENTER;
131     } else{
132         goto NEXT_ITEM;
133     }
134
135 onscreen 'SAPMM07M.0421'
136     if(_message.substring(0,2) == "E:"){
137         message(_message);
138         enter('/n');
139         goto SCRIPT_END;
140     }
141     z_mbla_last_item_onscreen = parseInt(z_mbla_last_item_onscreen).toString();
142     if(z_mbla_last_item_onscreen == z_mbla_material_total_counter){
143         enter('?'); // Post or Save, but just doing refresh in this example
144     } else{
145         z_mbla_relrow = 1;
146         enter("/19"); // Click "New Item"
147         goto NEW_ITEM;
148     }
149 onerror
150     message(_message);
151     enter('/n');
```

```

151         enter('/n');
152         goto SCRIPT_END;
153
154     SCRIPT_END;;
155 }
156
157
158 // User Interface
159 del('X[IMAGE_CONTAINER]'); // Delete ActiveX Container on SAP Easy Access screen
160 del('P[User menu]');
161 del('P[SAP menu]');
162 del('P[SAP Business Workplace]');
163 del('P[Display role menu]');
164 del('P[Add to Favorites]');
165 del('P[Delete Favorites]');
166 del('P[Change Favorites]');
167 del('P[Move Favorites down]');
168 del('P[Move Favorites up]');
169 del('P[Create role]');
170 del('P[Assign users]');
171 del('P[Documentation]');
172
173 inputfield([1,1], "Document Date", [1,20], {"name":"z_mbla_docdate", "size":10, "date":true, "required":true}); // 12.12.2006
174 inputfield([2,1], "Posting Date", [2,20], {"name":"z_mbla_postdate", "size":10, "date":true, "required":true}); // 12.12.2006
175 inputfield([3,1], "Movement Type", [3,20], {"name":"z_mbla_mvmttype", "size":3, "required":true}); // 201
176 inputfield([4,1], "Plant", [4,20], {"name":"z_mbla_plant", "size":4, "required":true}); // 1000
177 inputfield([5,1], "Storage Location", [5,20], {"name":"z_mbla_sloc", "size":4, "required":true}); // 0001
178 inputfield([6,1], "Cost Center", [6,20], {"name":"z_mbla_costctr", "size":10, "required":true}); // 1000
179
180 z_endrow = 10;
181 comment([8,01], "Item Material Quantity");
182 for(item_counter=1; item_counter<z_endrow; item_counter++){ // Display 10 rows on UI
183     inputfield([item_counter+8,01], {"name":"z_mbla_item_&V[item_counter]", "size":4, "readonly":true, "alignright":true, "nolabel":true});
184     inputfield([item_counter+8,06], {"name":"z_mbla_material_&V[item_counter]", "size":18, "nolabel":true}); // 1157
185     inputfield([item_counter+8,25], {"name":"z_mbla_quantity_&V[item_counter]", "size":10, "nolabel":true});
186
187     set("V[z_mbla_item_&V[item_counter]]", item_counter);
188 }
189
190 pushbutton([TOOLBAR], "@02@Update - MB1A", '?', {"process":"mbla_update}); // Function call to update
191

```