

July Updates: Profound Mobile Speed Improvements

Profound Mobile Update

Version 2.8.0 – 2.8.5

Our team has been hard at work updating our products and services. See the latest updates for Profound Mobile and the Profound UI.

Improvements to Profound UI Mobile Client

We have released version 2.8 of the iOS Profound UI Mobile Client which designed to work with Profound UI 6.10 and later. This contains significant under-the-hood changes which are apparent in its improved responsiveness, faster launch time, and improved compatibility with iOS. At the heart of the improvements is the replacement of the web view engine from Apple's older UIWebView to their newer, more advanced WKWebView. A web view is basically the web browser in which web apps like Profound UI execute when run inside of a native application (like the Profound UI Mobile Client).

Besides supporting the latest web standards, WKWebView is fast. JavaScript code is just-in-time compiled in WKWebView, which improves execution speed by 200%-300%! (However, it's important to note that interacting with a web app is more than just JavaScript execution.) In Profound's tests using the Speedometer browser benchmark, WKWebView showed a *more than 50% performance improvement* over UIWebView on the same iPhone.

In older releases of the Profound UI mobile client, users may have occasionally experienced some side effects in iOS 13 and 14 due to Apple's older UIWebView technology. For example, voice dictation stopped working, and there were sometimes UI glitches with items like date pickers. The new Profound UI Mobile Client version 2.8 with WKWebView corrects these issues and restores full functionality.

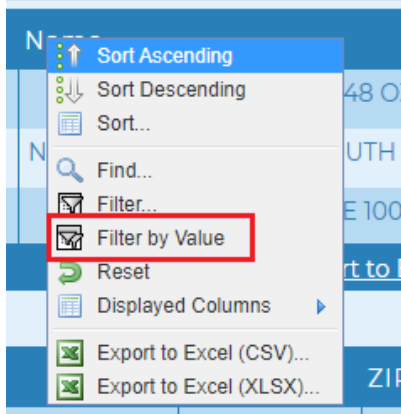
Profound UI New Features

Version 6.13.0

Grid Filter by Value

Profound UI has had the ability to filter grid columns for several years now, but in the traditional filter support you had to type a search string to filter by, which required you to know which values were found in the grid column. With this new feature, it will show the available values and let you choose which ones to filter by.

To enable, set the "Filter Option" property on a grid. To use, right-click on a column to pull up the Grid Menu, which will now have a "Filter By Value" option.



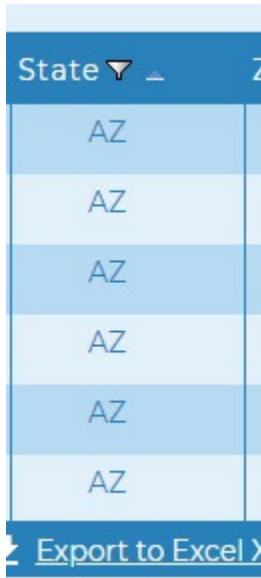
This brings up a panel which shows the data from the selected column.

If another filter is already present on the column, some options on the panel will be pre-selected. (This will be changing soon. If there is a filter on the grid, the panel will only retrieve filtered data, so this will no longer be necessary)

Note: If the table is database-driven and does not load all the data up front and has a lot of records, it may take a few seconds for Profound UI to load all of the values.

Filter	Data
<input type="checkbox"/>	NALGENE CANTEEN 48 OZ
<input type="checkbox"/>	NALGENE CANTEEN 96 OZ
<input type="checkbox"/>	NALGENE 16 OZ WIDE-MOUTH LEXAN
<input type="checkbox"/>	NALGENE 32 OZ WIDE-MOUTH LEXAN
<input type="checkbox"/>	NALGENE WIDE MOUTH LOOP-TOP BO
<input type="checkbox"/>	MOTOROLA PEANUT RADIO MODEL T6
<input type="checkbox"/>	SUN SHOWER ENCLOSURE
<input type="checkbox"/>	NALGENE 16 OZ NARROW-MOUTH LEX

Filter	Data
<input type="checkbox"/>	AA
<input type="checkbox"/>	AE
<input type="checkbox"/>	AK
<input type="checkbox"/>	AL
<input type="checkbox"/>	AP
<input type="checkbox"/>	AR
<input type="checkbox"/>	AS
<input checked="" type="checkbox"/>	AZ
<input checked="" type="checkbox"/>	CA
<input type="checkbox"/>	CO
<input type="checkbox"/>	CT
<input checked="" type="checkbox"/>	DC
<input type="checkbox"/>	DE



Checking a checkbox will add the corresponding data to the filter text (which creates a “Values (choice 1, choice2, choice3, etc)” filter.) Then apply it to filter the grid.

In the pictures above “AZ, CA, and DC” have been selected. For the filter text will be “Values AZ, CA, DC” and the column will only show those options

(This feature is not supported in Internet Explorer.)

Added the Ability to Bind the Legend Property of a Field Set Layout to a Variable

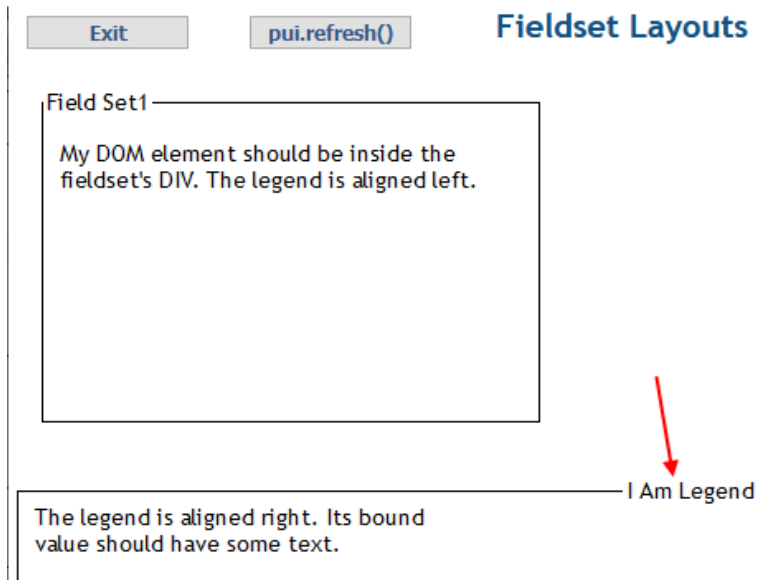
In the past the “legend” property of the field set layout could only be hard coded in display files or set via complex JavaScript. Now, it is possible to bind the legend property of a field set layout directly to a program variable. For example:

The screenshot shows a development tool interface with two main panels. The left panel, titled 'Fieldset Layouts', displays a grid with two field sets. The top field set, 'Field Set1', contains the text 'My DOM element should be inside the fieldset's DIV. The legend is aligned left.' The bottom field set contains the text 'The legend is aligned right. Its bound value should have some text.' A red arrow points from the 'legend' property in the right panel to the '[legend]' text in the bottom field set. The right panel, titled 'Layout Properties - Layout3', shows a table of template settings.

Field Name	Data Type	Where Used
FIELDSETS (2 Items)		
BTNEXT	indicator	Button1
LEGEND	char (30)	Layout3 (legend)

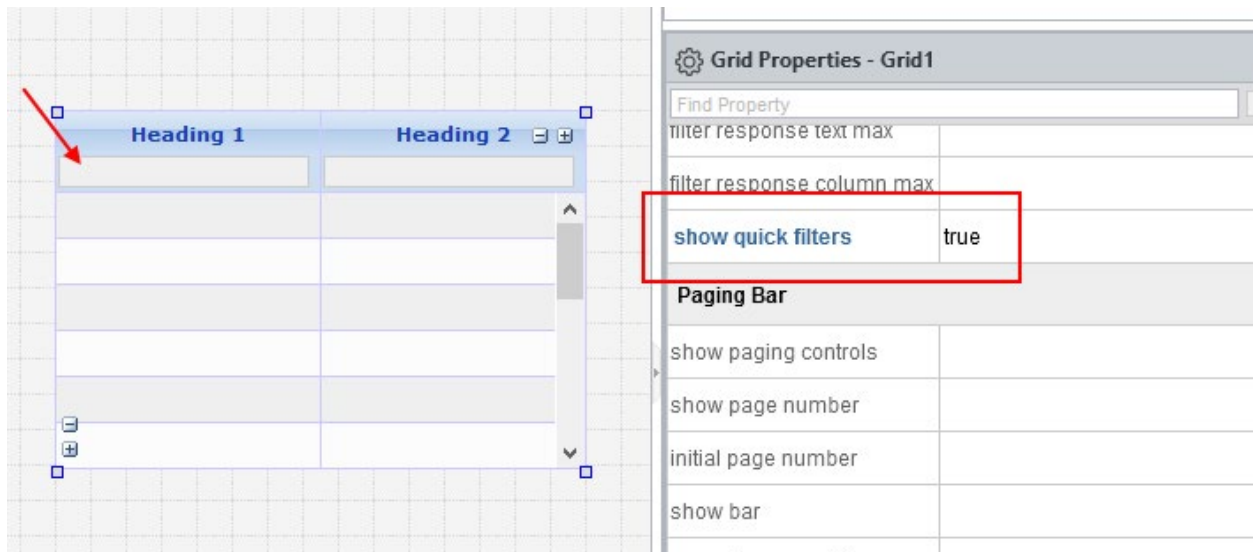
Template Settings	
template	fieldset
legend	legend
legend align	right
legend style	

Binding lets you set the legend programmatically:



Added Grid Quick-Filter ability

Our new "show quick filters" property allows filter boxes to always be visible. Once set to true, you no longer need to right-click the column and select filter!



Quick filters can make filtering grid data a simpler and faster task for the user:

PRID	PNAME ▾	PPRICE ▾	PSTOCK	Categories
	abc	1		
ABC BE839	ABC BELAY SEAT	5.61	50	3
ABC CH908	ABC CHALK BAGS	2.00	50	.
ABC CH909	ABC CHALK BAGS	2.00	50	105
ABC CR923	ABC CRAGSTER BOLT KIT	25.00	50	89
ABC RO910	ABC ROCK STAR CHALK BAG	5.00	50	79
ABC SE962	ABC SENTENTIAL GEAR SLING	5.50	50	74
ABC 4715	ABC 4 STEP POCKET AIDER	3.95	50	83
THE BL802	THE BLAST BY ABC	4.95	91	91

The user can simply on the always-visible filter boxes and type a new filter sting, and the grid view will automatically update to show the filtered data.

The Performance Stats in PUIWRKINST Are Now Available at No Charge

For years, there have been some performance tools available in the Profound UI Work with Instances (PUIWRKINST) tool, however prior to fix pack 13, it was necessary to pay for a separate license key. Now with Profound UI 6, fix pack 13 these tools are available to all customers free of charge. And who doesn't love free stuff?

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Work With Profound UI Instance Jobs                                POWER8
                                                                    Instance: PROFOUNDUI
Type options, press Enter.
 1=Pos To Ctl Job  4=End Job  5=Work With  8=Dump Call Stack  9=Dump Job Log

Opt  Role      JobNo/Term  User      Type  Status  Pty  CPU%  Temp  Storage
--  --      --         --      --    --     --   --    --    --
 1  HTTPMGR   912428     QTMHHTTP  BCH   SIGW   25   0     0     10mb
 2  HTTPLOG   912429     QTMHHTTP  BCI   SIGW   25   0     0     8mb
 3  HTTPMAIN  912430     QTMHHTTP  BCI   SIGW   25   0     0    38mb
 4  HTTPMAIN  912431     QTMHHTTP  BCI   DEQW   25   0     0    18mb
 5  CGI       912432     KLAW      BCI   TIMW   25   0     0    15mb
 6  CGI       912433     KLAW      BCI   TIMW   25   0     0    10mb
 7  CGI       912434     KLAW      BCI   TIMW   25   0     0    10mb
 8  CGI       912540     GHOPWOOD  BCI   TIMW   25   0     0    12mb
 9  CGI       912579     SKLEMENT  BCI   TIMW   25   0     0    17mb
10  CGI       912649     MATTHEWD  BCI   TIMW   25   0     0    18mb
11  CGI       912655     MATTHEWD  BCI   TIMW   25   0     0    15mb
12  CGI       923568     SKLEMENT  BCI   TIMW   25   0     0     9mb
13  GENIECTL  926780     QTMHHTP1  BCI   TIMW   25   0     0    16mb
14  GENIECTL  927286     QTMHHTP1  BCI   TIMW   25   0     0    15mb
                                                                    More...

F3=Exit  F5=Refresh  F8=Sort (Cursor)  F10=Restart Statistics  F11=View 2
F12=Cancel  F21=System command  F22=Show Only Application Jobs

ME  A                                07/003

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The preceding example shows statistics about the CPU percentage and temporary storage (aka memory) used by each of the jobs in one instance of Profound UI. (This example happens to show an idle

instance, so there's no CPU in use.) In addition to those columns, you can press F11 to view elapsed page faults, lock waits, disk I/O, total CPU used, and more!

Auto-Select Feature on the Date Field Widget

The "show today option" property of the date field widget has a new value called "auto-select." Without this setting, when you click the today button it positions the calendar on today's date, and you must the day to select it. With the new "auto-select" option enabled, clicking the today button will automatically select today's date and place the value into the date field.



Choices URL for Auto-Complete Enhancements

The textbox widget's "choices url" property can be used to call a REST API to get auto-complete suggestions while the user is typing. Prior to fix pack 13, the REST API support could not be used for a "reverse lookup" (an API call that sets the initial value when the screen loads.)

In fix pack 13, we added a new property "use choices url for reverse lookup" to enable calling a REST API for the initial screen value. In addition, the returned document supports a new JSON field called "valueField" that can be used to distinguish the value portion of the response from the choices that the user sees. With these options, you can write a far more sophisticated REST API for auto-complete choices.

More details of this new feature can be found here: <https://docs.profoundlogic.com/x/BYAU>