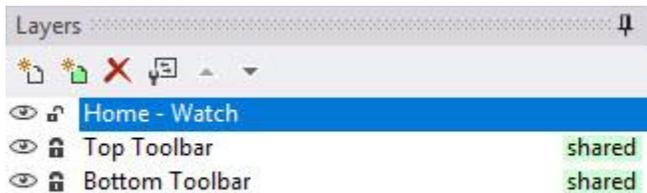


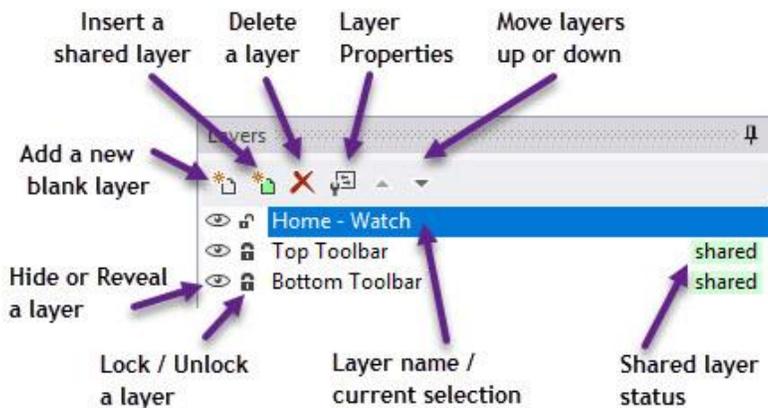
UNDERSTANDING LAYERS IN APEX

Layers are an easy way to manage common regions on the user interface, allowing you to edit these regions in a single place without the need to do so in various parts of the control interface. Also, you can easily manage bitmaps and pop-up elements in a single location as well.

First, a couple of changes in 10.4 you will notice immediately. There is a new “Layers” tab window on the right that can easily merge into the tools and options tab menu by simply dragging into the tabbed area.



You will also notice depending on the controller interface you are using, that there are multiple layers automatically created. For example, if you have added an RTIPanel iPhone in the add workspace controller tab, you will see that APEX created three separate layers for you. A Home – Watch, Top Toolbar, and Bottom Toolbar layer now exist, and since the toolbars are locked automatically, you will not be able to select or edit them in the UI.



Add a new blank layer – this option will allow you to create a new layer. Once selected you can build a user interface in the form of a layer in which users can share throughout your interface. You can lock the layer and determine if you want to connect the visible state to a variable status.

Insert a shared layer – Once a layer exists and the shared option is designated, you can insert the layer on the current page or all pages of the interface.

Delete a layer – Select the layer you wish to delete and click the delete layer function. The layer will delete, even if shared on the current page.

Layer properties – Will allow the programmer to change the name of the layer, the source page location of the layer, if there is a visible state variable associated with the layer, and the ability to select a locked and shared status.

Move layers up or down – This option will allow you to move layers up in down in the priority in which they appear on the screen. Any other layers will not overlap a layer placed on top.

Hide or reveal layers – Selecting or de-selecting this option will allow you only to view the layers you wish to see in the user interface work area. If an iris is visible, the layer displays in the user interface work area.

Lock / Unlock layers – Once a layer is locked, it is not possible to edit that layer or any bitmaps associated to it. A layer may be unlocked when it there is a need to edit the layer by toggling the lock icon.

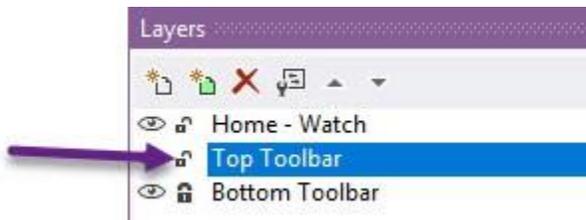
Layer name / current selection – Once a layer is selected you may make changes on the screen if the layer is not locked. When the programmer selects a layer, any on-screen changes will affect that layer.

Layer shared status – Layers that you share will be denoted with shared status, allowing them you to share them across the user interface.

Editing existing layers in APEX

It is important to understand that everything has a layer in APEX. In the case of an iPhone, on the home page, a home page is a layer, and the top toolbar and the bottom toolbar are layers. APEX will automatically lock the top and bottom layers. To make changes to those layers, you need to click the lock icon which will toggle from a locked to unlock state, allowing you to make changes. Once you make a change, you can easily lock a layer which will prevent accidental changes.

To edit a layer, simply click the lock icon and it will toggle the lock from a locked state to an unlocked state.

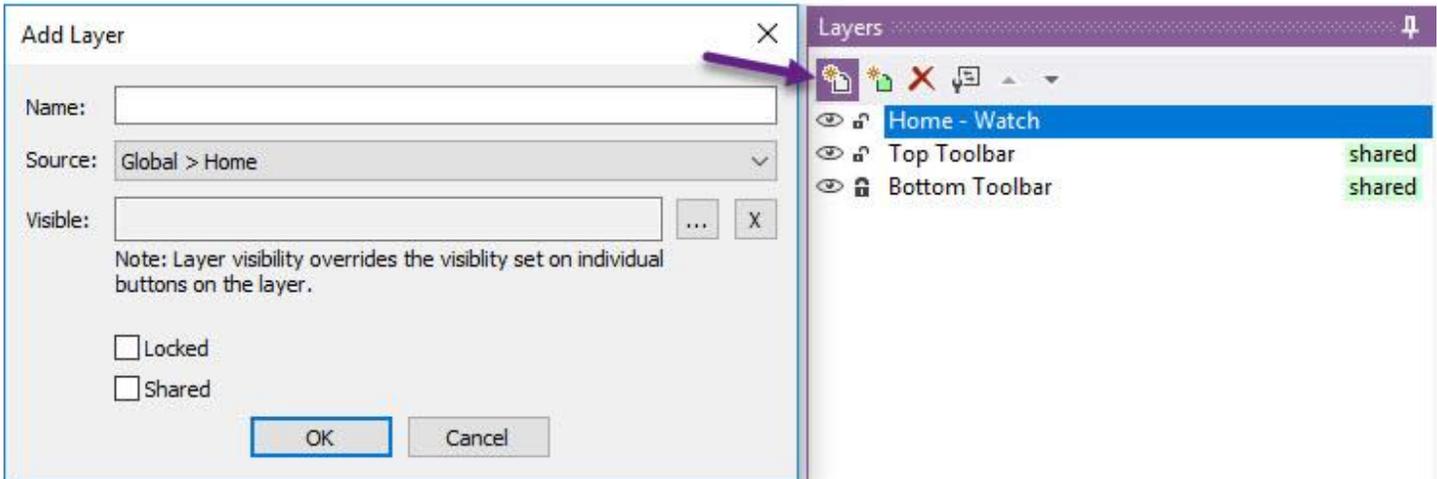


Be sure always to select the layer you wish to edit before making any changes. The current layer edited will be highlighted in blue, as shown above. Once you make a change, proceed to lock the layer so that it's not prone to any unintended revisions.

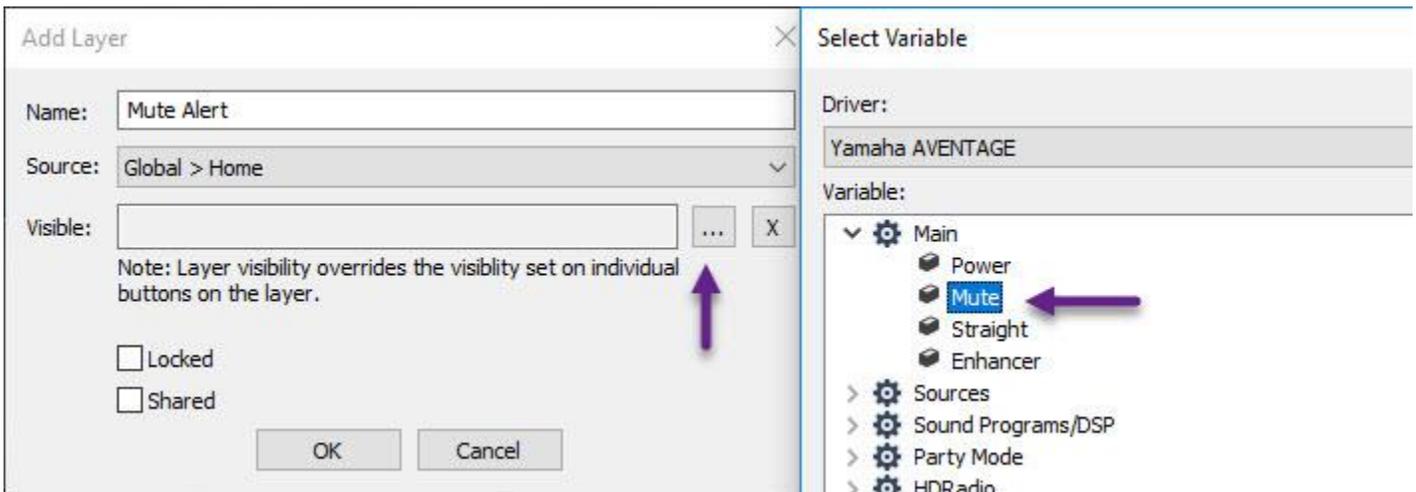
The main page for the layer, in the above example "Home – Watch" will always be unlocked by default. If the main page is unlocked, the programmer can make changes to the page freely. Again, you must select the layer you wish to edit on the UI.

Adding a new blank layer

Select the first icon on the left of the layer toolbar. An add layer message box will appear. For this example, we will create a mute popup alert layer.

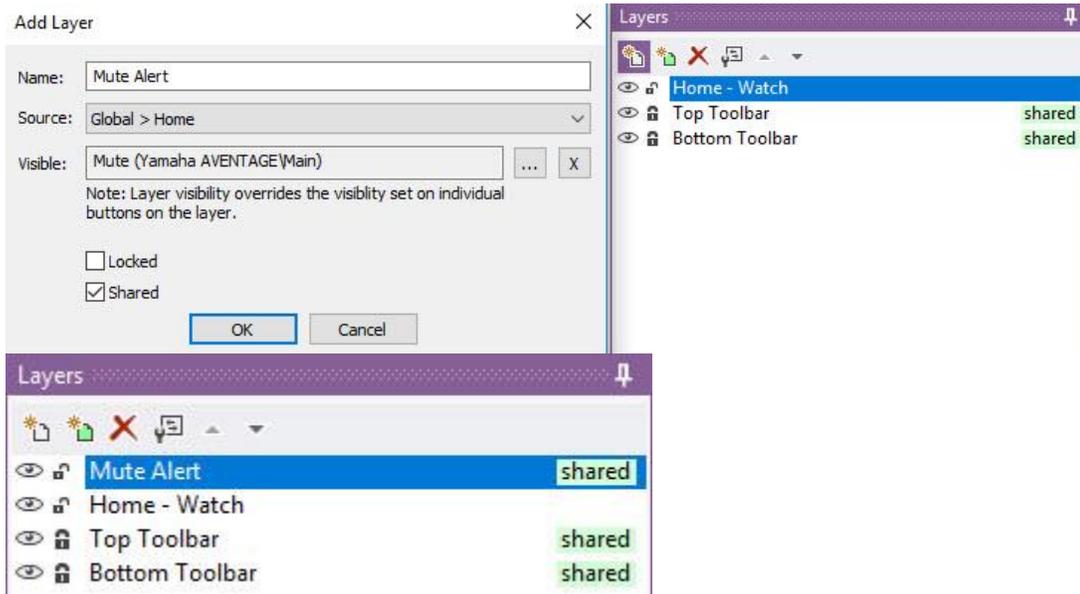


In the name field, select a name for the layer that matches the function. In this case, we will call it “Mute Alert.” The Source drop-down will indicate where the layer resides originally. If the layer is located somewhere other than the page, you are currently on, select it from the menu.

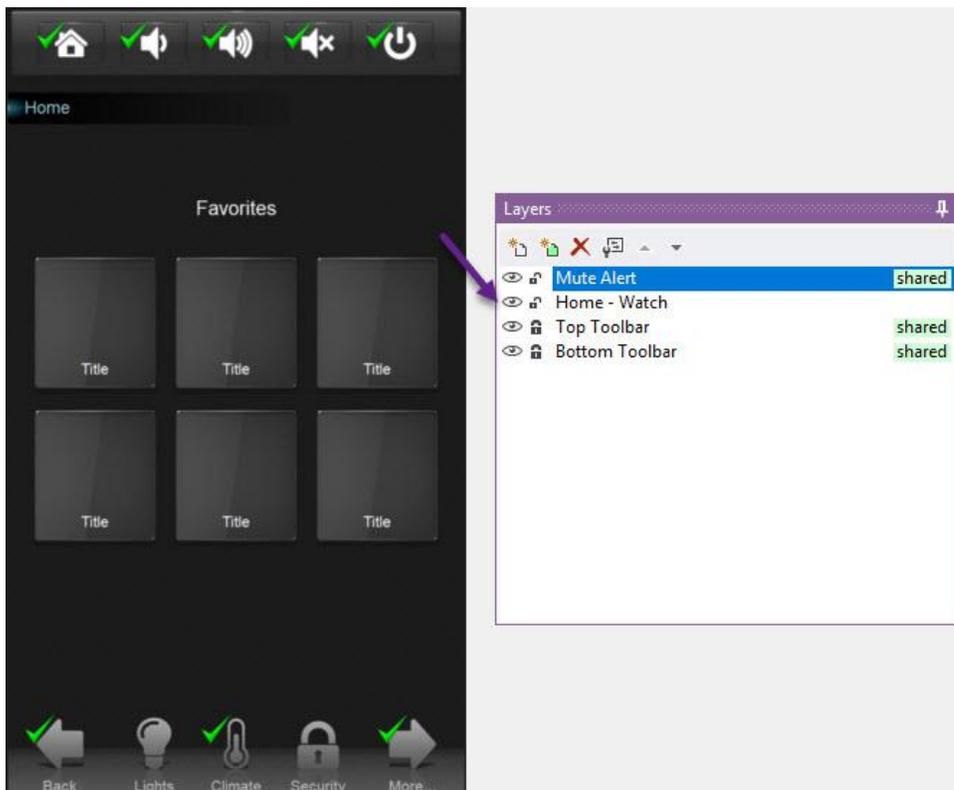


For the visible field, you may select a variable from any driver or any of APEX’s internal variables. Once the state of the variable selected is true, the layer will appear. In this case, we select the Yamaha Aventage driver and the mute status under the main variables. The intention would be to create a mute alert popup when the receiver mutes.

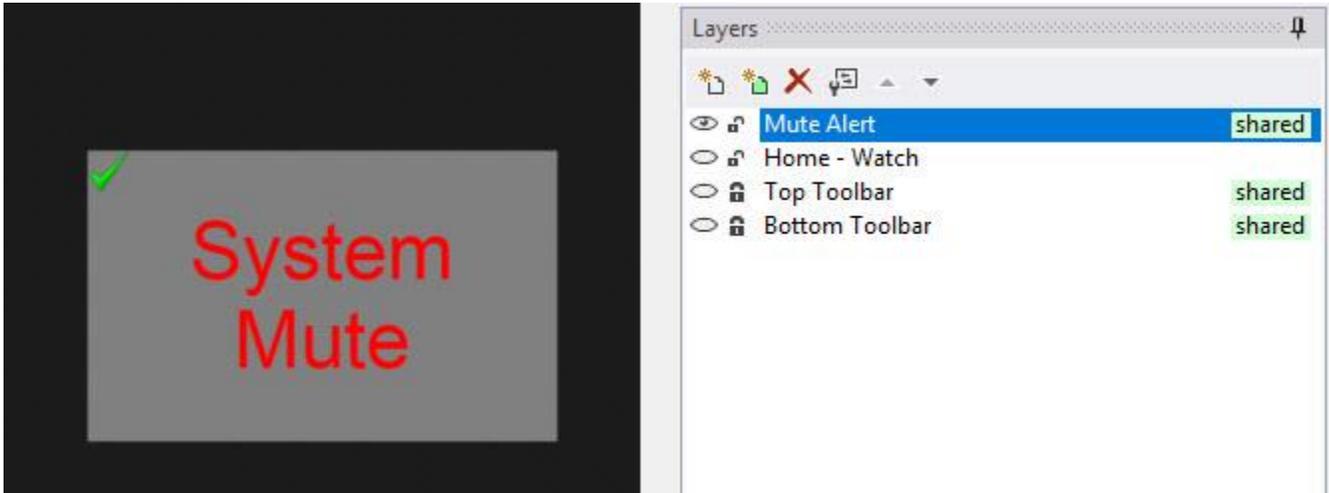
Next, you may choose to lock the layer, but it is best to wait until you build the interface on the layer before doing so. If the layer needs to appear on additional pages in the user interface, check off the shared selection. In this case, the mute popup will appear across most of the interface, so the shared box is selected.



Before building the interface on the mute layer, make sure it is selected, and the lock status sets to unlock. We are now ready to build our mute alert interface on the layer we have just created.

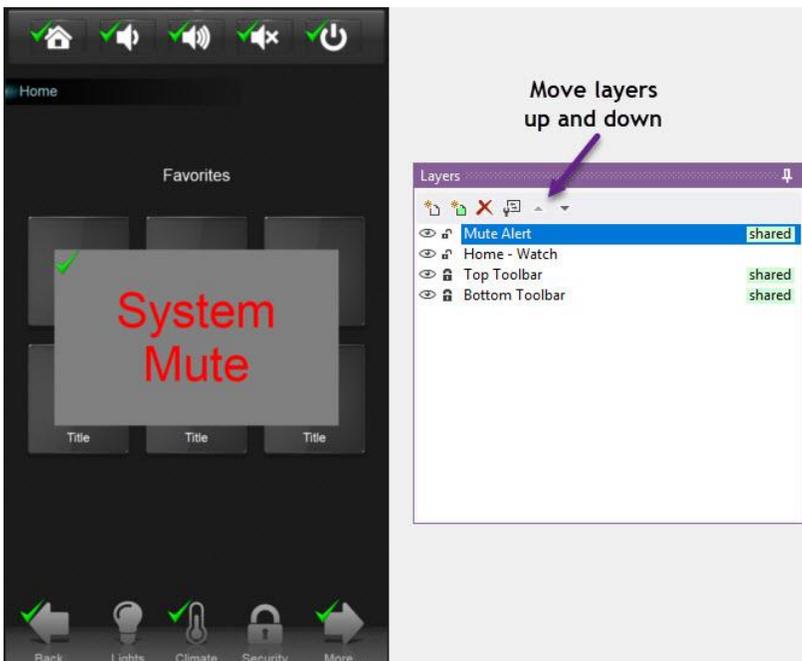


Since the eye icons in the layer interface display an iris, all layers on this page are displayed which can be distracting when building a user interface on a single layer. We can easily toggle the eye icons just like the lock status and hide/unhide each layer if we like. Hide all the layers except the one that you are building on.

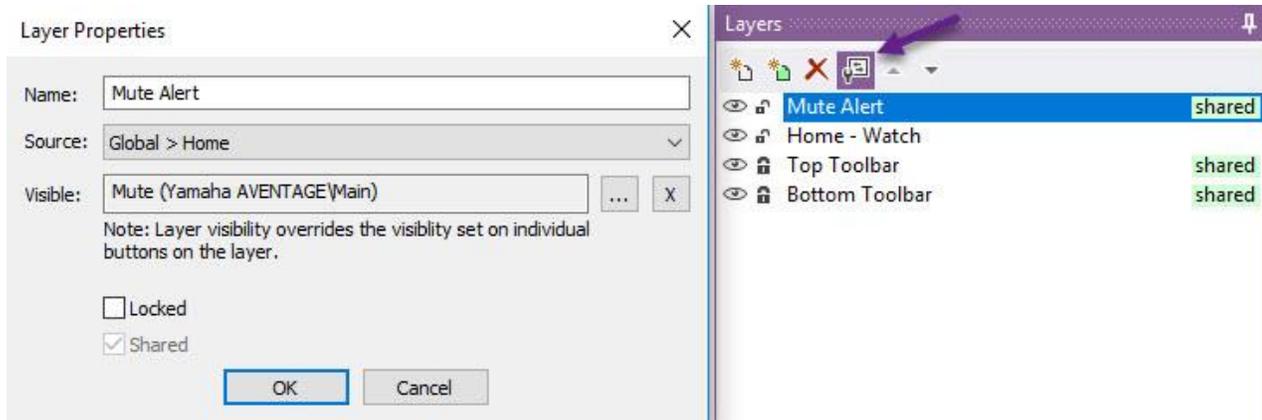


Since the message alert we created has a layer visibility variable on it, it will display a check mark. After we have completed our layer design, we may unhide the layers by toggling the eye icon.

Here is our completed design with the additional layer we created. You can move the arrow up/down buttons once a layer is selected if you decide the layer should have a different level on the interface. In our example, the mute alert layer will always appear on the top level, and no bitmaps will overlap.

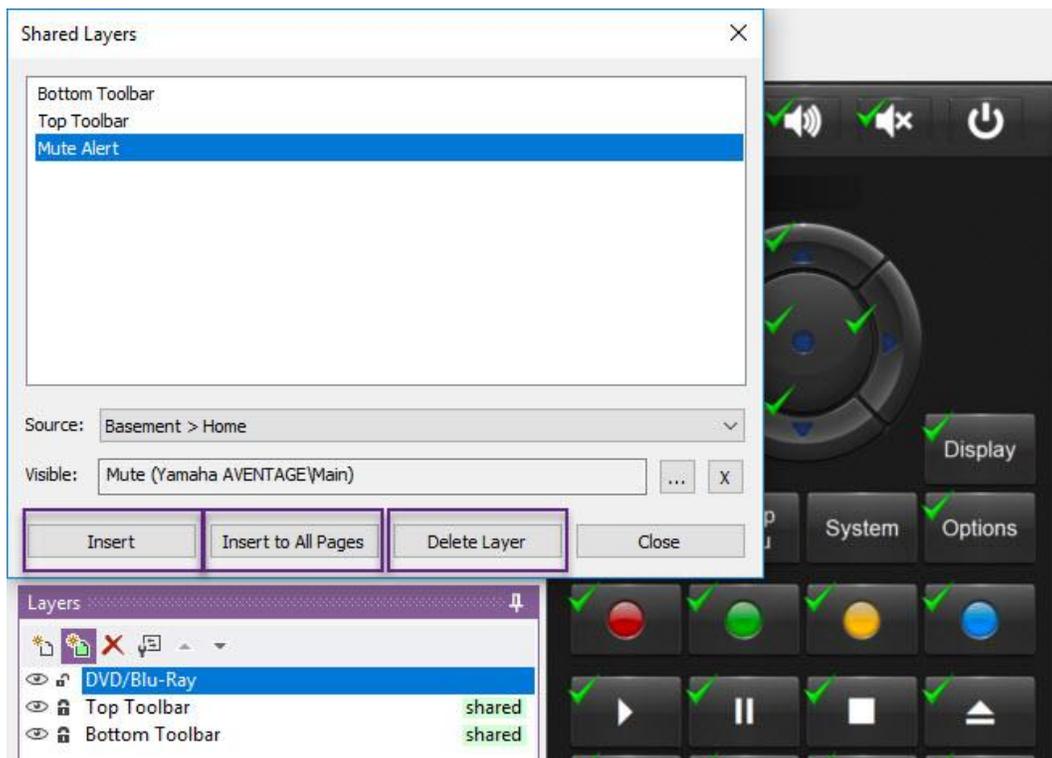


Once you create a layer, you may choose to delete it by clicking on the red “X” button, or you may access the layer properties to lock the layer or make any changes. It’s always a good idea to lock the layer when completed.



Inserting a shared layer

Once you have created a shared layer, no need to copy and paste it everywhere you need it. Go to another page in the interface where the layer is needed and click the green “insert shared layer” icon in the layer toolbar.



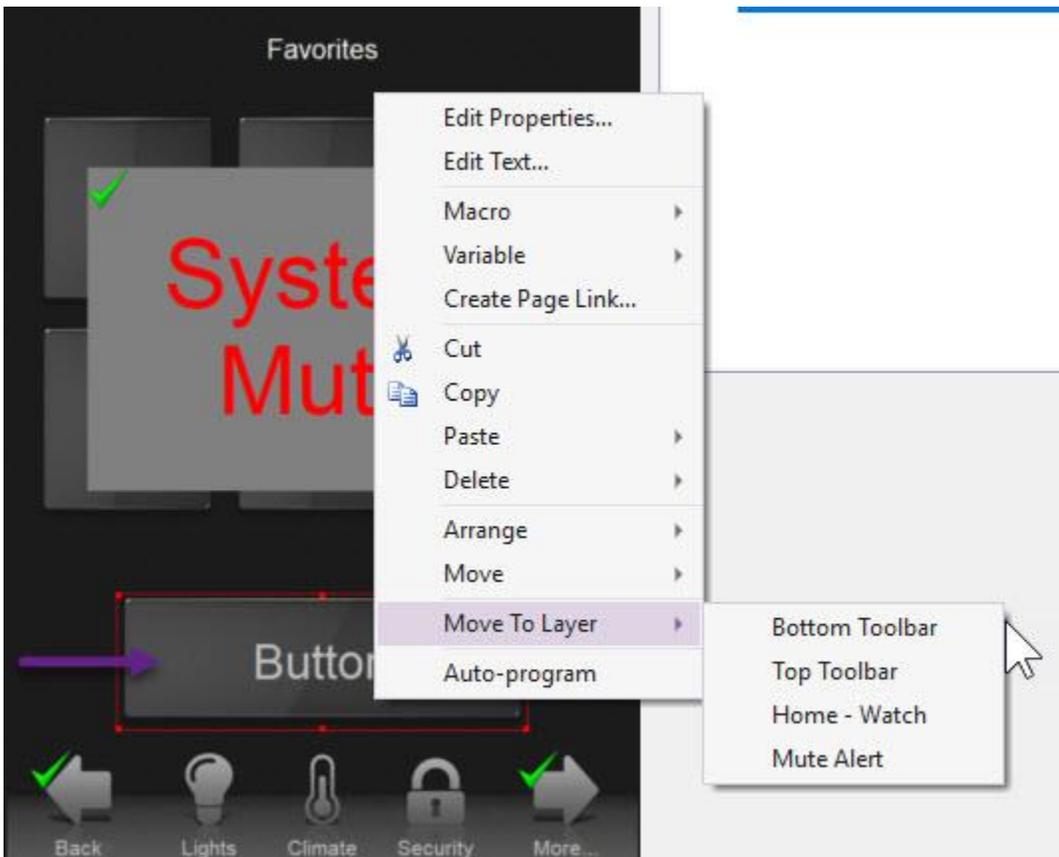
Select the corresponding layer, in this case, the “mute alert,” and you will have the ability to insert the layer on the current page, on all pages, or you delete the layer completely. Note that the layer must be shared to use this feature.

For our iPhone example, the top and button toolbar layers have been automatically created by APEX in the form of shared layers. Should you wish to edit a layer, select it, make sure it is unlocked, and any changes made will be shared throughout the interface.

Some important reminders:

- Always make sure the layer is selected if you wish to perform edits, including the main page.
- Make sure you unlock the layer should you want to revise it.
- You will not be able to distribute a layer across the interface unless the shared box is selected.
- Make sure to move the arrows up and down to ensure the layer will not overlap any buttons.

Should you choose to add a bitmap to a layer easily, right click on the bitmap and select the “move to layer” function. Select the layer you want the bitmap to occupy. You may select multiple bitmaps, making it easy to create layer interfaces.



Should you have any questions, please contact the Dealer Experience Team.