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HyperWorks

Altair HyperMesh 2019 Tutorials

HM-8010: Add a Button to the User Page on the Utility Menu

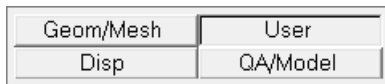
HM-8010: Add a Button to the User Page on the Utility Menu

In this tutorial you will create a new button on the **User** page of the **Utility menu**.

Tools

The **User** page is available on the **Utility menu**. To access the User page:

1. From the menu bar, click **View > Browsers > HyperMesh > Utility**.
2. At the bottom of the **Utility menu**, click the **User** button



Command files and Tcl/Tk scripts can be added to the `userpage.mac` file. When HyperMesh starts, it first looks for the `userpage.mac` file in the directory from which it launches, and then in the installation directory. UNIX users also have the option of putting the `userpage.mac` file in their home directory.

The `userpage.mac` file controls the display and available operations on the **User** page of the HyperMesh **Utility menu**. In order to invoke a command file or Tcl/Tk script from the **User** page, a button must be defined inside the `userpage.mac` file. The `*createbutton` command is used to define the button and its characteristics. The syntax for this command is:

```
*createbutton(page, name, row, column, width, COLOR, helpString, macroName [
, arg1 ... ])
```

where:

page	The page number on which the button is to appear. For the User page, this value is 5.
name	The text to display on the button, enclosed in quotes: " ".
row	The row in which to place the button. The number of visible rows depends on your monitor's graphics resolution. A positive value indicates an absolute row number. A 0 indicates the next highest available row. A negative value indicates the number of rows to skip. Rows begin at the bottom of the menu.
column	The column where the button starts (0-10). Columns begin to the right of the menu.
width	The width of the button (max = 10).
COLOR	The color of the button. The available button colors are: RED, BLUE, GREEN, CYAN, MAGENTA, YELLOW, GRAY, and BUTTON (background). The color name must appear in capital letters.

helpString	The string to be displayed in the menu bar when the middle mouse button is pressed and the button is clicked, enclosed in quotes: " ".
macroName	The command to run when the button is pressed, enclosed in quotes: " ".
arg1...	A list of optional arguments passed to the script.

Exercise

In this exercise, you will create a button on the **User** page that will launch the `lighting.tcl` dialog from the HyperMesh installation.

Step 1: Create the `userpage.mac` file.

Using a text editor, create a blank `userpage.mac` file in the appropriate directory.

When HyperMesh starts, it first looks for the `userpage.mac` file in the directory from which it launches and then in the installation directory. On Windows, the default launch directory is in the **My Documents** folder. UNIX users also have the option of putting the `userpage.mac` file in their home directory. It is not recommended to modify the `userpage.mac` file in the installation directory.

Step 2: Add the command to create the button.

1. Add the following text to the `userpage.mac` file:

```
*createbutton(5,"Lighting",10,5,5,YELLOW,"Launch the lighting.tcl script","EvalTcl","lighting.tcl")
```

The `EvalTcl` macro is defined in the `globalpage.mac` file in the HyperMesh installation. It takes a Tcl script as its argument and executes the script.

Notice that the full path is not used to reference the `lighting.tcl` script. A full path can be specified if the file is not located in one of the predefined paths that HyperMesh searches to find scripts. Users can add additional search paths using the `TCL_INCLUDE` environment variable. Relative paths can also be used from these search paths.

2. Save the modified `userpage.mac` file.

Step 3: Load the updated `userpage.mac` file.

1. Restart HyperMesh from the working directory or reload the current macro menu `.mac` file. This allows the current session to use the modified `userpage.mac` file.

To reload the current macro menu `.mac` file while HyperMesh is open, from the menu bar select **Preferences > Menu Config** and click on **retrieve** next to **macro file**. Make sure to load the proper `.mac` file from the `hm/scripts/<profile name>` directory based on the current user profile, or load the default `hm.mac` in the `hm/bin/<platform>` directory if no user profile is loaded.

2. Click the **User** button on the **Utility Menu**. You will see **Lighting**, the button defined in Step 2. Compare this button to its definition. It is yellow in color, begins in column 5 of row 10, and extends half way across the **Utility Menu**.