

# HyperWorks

# Altair HyperView 2019 Tutorials

HV-3030: Editing Legends

## **HV-3030: Editing Legends**

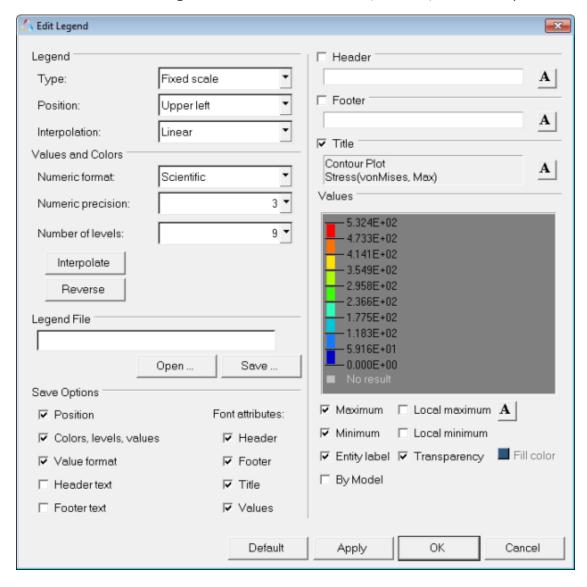
In this tutorial, you will:

- Edit the legend format
- Edit legend colors
- Edit the legend fill color
- Save legend settings for future use

#### **Tools**

To access the **Edit Legend** dialog:

• Click the *Edit Legend* button in the **Contour**, **Vector**, or **Tensor** panel.



The **Edit Legend** dialog allows you to change the color band, format, and descriptions for legends.



### **Exercise: Edit the Legend and save the settings**

This exercise uses the d3plot file as both the model and the results file.

#### Step 1: Edit the legend format.

- 1. Load the d3plot file, located in the animation\truck folder.
- 2. Create a **vonMises** stress contour using the **Contour** panel ...
- 3. Click Apply.
- Animate the model .
  Observe the changes in the legend.
- 5. Click the **Animation Controls** panel button in the **Animation** toolbar.
- 6. Slow down the speed of the animation by adjusting the **Max Frame Rate**.
- 7. Pause the animation  $\mathbf{0}$ .
- 8. Return to the **Contour** panel.
- 9. Click Edit Legend.
- 10. Change the legend **Type** to **Dynamic scale**.

The legend values automatically change in the preview window.

11. Change the legend **Position** to **Lower left** and click **Apply**.

The legend moves to the new position.

- 12. Close the **Edit Legend** dialog.
- 13. Animate the model.

Observe the legend updates for each time step.

- 14. Stop the animation.
- 15. Open the **Edit Legend** dialog.



#### 16. Experiment with the following:

- Change the numeric format.

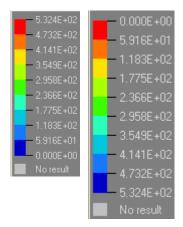
The format automatically changes in the legend box.

- Change the numeric precision.
- Change the number of levels.

The number of color bands in the legend box automatically changes.

- Click the **Reverse** button.

The values are reversed in the legend box. The lowest value is now red; the highest is now blue.



Original Reversed levels levels

- 17. Change the legend **Type** to *Fixed scale*.
- 18. Click on a number in the legend box and enter a new value.
- 19. Press ENTER.

The edited value is displayed in bold font. The remaining values linearly interpolate.

- 20. Add a header and footer to the legend.
  - Activate the **Header** check box and enter text in the text box.
  - Click the font button  $oldsymbol{A}$  and change the font type and size.
  - Click OK.
  - Activate the **Footer** check box and enter text in the text box.
  - Click the font button  $\overline{\mathbf{A}}$  and change the font type and size.
  - Click OK.
  - Click **Apply** to add the legend header and footer to the legend on the screen.



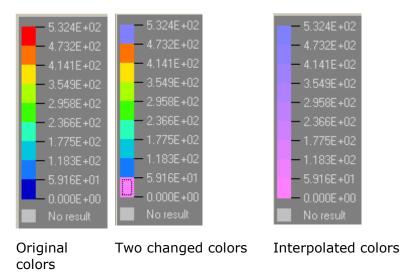
#### Step 2: Edit legend colors.

- 1. Change the color of a legend band.
  - Click on a color band.
  - Select a new color.
  - Click OK.
  - Change another color.
- 2. Interpolate colors between two color bands.
  - Click Interpolate.
  - Click on the first changed color.
  - Click on a second changed color.

The colors between the two selected colors are interpolated.

3. Click Apply.

The new color scheme is applied to the model.



#### Step 3: Edit the legend fill color.

- 1. Change the background color of the legend.
  - Uncheck the **Transparency** check box.
  - Click the **Fill color** box and select a new color from the palette.

**Note** - The **Fill color** option is disabled if the **Transparency** option is activated.

- Click Apply.

The background color of the legend in the graphics area changes to the new color.

- Change the legend background to another color.

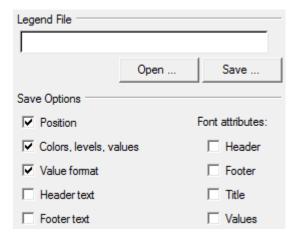


- 2. Change the legend fill color back to transparent.
  - Activate the **Transparency** check box.
  - Click Apply.

Observe how the background color of the legend is now the same color as the graphics background.

#### **Step 4: Save legend settings for future use.**

Once you have completed your legend settings, you can save them for future use. Items that can be saved are listed in the **Save options** section.



- 1. Activate the check boxes for the attributes you want to save.
- 2. Click Save.
- 3. Designate a file name and path.

Files are saved in Tcl format.

- 4. Click Save.
- 5. Click **Default** to return to the default settings.
- 6. Click Apply.
- 7. Click **Open** to open the saved file and load the previously determined legend settings.

The contour colors and legend are retrieved just as you saved them.

