Legend — Matplotlib 1.5.1 documentation

matplotlib.legend
The legend module defines the Legend class, which is responsible for drawing legends associated with axes and/or figures.

Important

It is unlikely that you would ever create a Legend instance manually. Most users would normally create a legend via the `legend()` function. For more details on legends there is also a legend guide.

The Legend class can be considered as a container of legend handles and legend texts. Creation of corresponding legend handles from the plot elements in the axes or figures (e.g., lines, patches, etc.) are specified by the handler map, which defines the mapping between the plot elements and the legend handlers to be used (the default legend handlers are defined in the `legend_handler` module). Note that not all kinds of artist are supported by the legend yet by default but it is possible to extend the legend handler's capabilities to support arbitrary objects. See the legend guide for more information.

class `matplotlib.legend.DraggableLegend`(*legend, use_blit=False, update='loc'*)
matplotlib.legend_handler
This module defines default legend handlers.

It is strongly encouraged to have read the legend guide before this documentation.

Legend handlers are expected to be a callable object with a following signature.

```
legend_handler(legend, orig_handle, fontsize, handlebox)
```

Where *legend* is the legend itself, *orig_handle* is the original plot, *fontsize* is the fontsize in pixles, and *handlebox* is a OffsetBox instance. Within the call, you should create relevant artists (using relevant properties from the *legend* and/or *orig_handle*) and add them into the handlebox. The artists needs to be scaled according to the fontsize (note that the size is in pixel, i.e., this is dpi-scaled value).

This module includes definition of several legend handler classes derived from the base class (HandlerBase) with the following method.

> def legend_artist(self, legend, orig_handle, fontsize, handlebox):

class `matplotlib.legend_handler.HandlerBase`(*xpad=0.0, ypad=0.0, update_func=None*)
A Base class for default legend handlers.

The derived classes are meant to override *create_artists* method, which has a following signature.:

```
def create_artists(self, legend, orig_handle,
                   xdescent, ydescent, width, height, fontsize,
                   trans):
```

The overridden method needs to create artists of the given transform that fits in the given dimension (xdescent, ydescent, width, height) that are scaled by fontsize if necessary.

`adjust_drawing_area`(*legend, orig_handle, xdescent, ydescent, width, height, fontsize*)
`create_artists`(*legend, orig_handle, xdescent, ydescent, width, height, fontsize, trans*)
`legend_artist`(*legend, orig_handle, fontsize, handlebox*)
Return the artist that this HandlerBase generates for the given original artist/handle.

Parameters:
legend : `matplotlib.legend.Legend` instance

> The legend for which these legend artists are being created.

orig_handle : `matplotlib.artist.Artist` or similar

> The object for which these legend artists are being created.

fontsize : float or int

> The fontsize in pixels. The artists being created should be scaled according to the given fontsize.

handlebox : `matplotlib.offsetbox.OffsetBox` instance

> The box which has been created to hold this legend entry’s artists. Artists created in the `legend_artist` method must be added to this handlebox inside this method.

`update_prop`(*legend_handle, orig_handle, legend*)