SOLIDWORKS 2016 User Interface Update

The SOLIDWORKS 2016 User Interface has undergone a significant revamp for SOLIDWORKS 2016 this document illustrates the key differences and should help adapt to those changes and make best use of the improvements.

Icons and Background

The icons seen in SOLIDWORKS 2015 have not seen a significant update since SolidWorks 2004 so were overdue for "modernisation"

2015
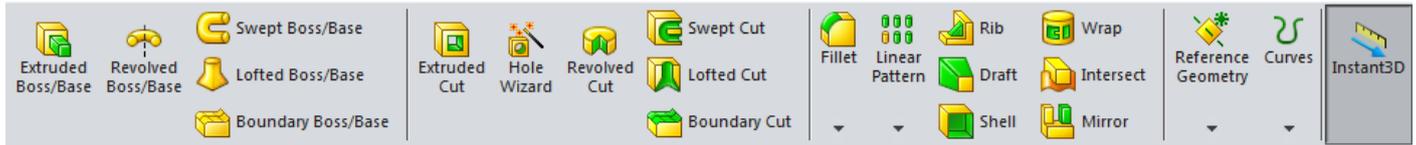
2016

While we can see a clear difference in the colour scheme and some of the icons have been revamped, you can also see that the icons are in the same position between versions meaning the same familiar mouse clicks.

Key Icon Changes

The most noticeable changes are;

Adding and editing sketches- We now see a very clear difference between the icons to edit and add sketches to prevent accidental selection
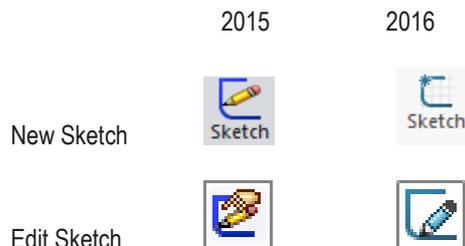
Hide and Show- The icons have changed to an eyeball which differs in appearance when hiding/ showing

Custom Properties (left) and Options (right)
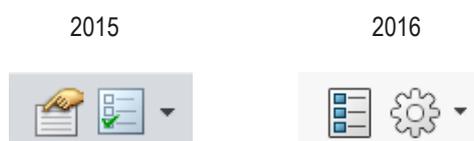
Interface Scaling & High Resolution Screen Support

The primary reason for changing the icons is to change from the pixel/image based icons in <2015 to vector based icons and text which scales as you change the windows text scaling settings. This allows SOLIDWORKS 2016 to support screen resolutions beyond regular "HD" (1920x1080), for instance 3K, 4K and 5K screens, or just those users who prefer larger text/icons Below you can see at 3820x2160 resolution the text is very hard to see at 100% scaling, even going as high as 200-250% scaling may be necessary depending on screen size.

100% Scaling
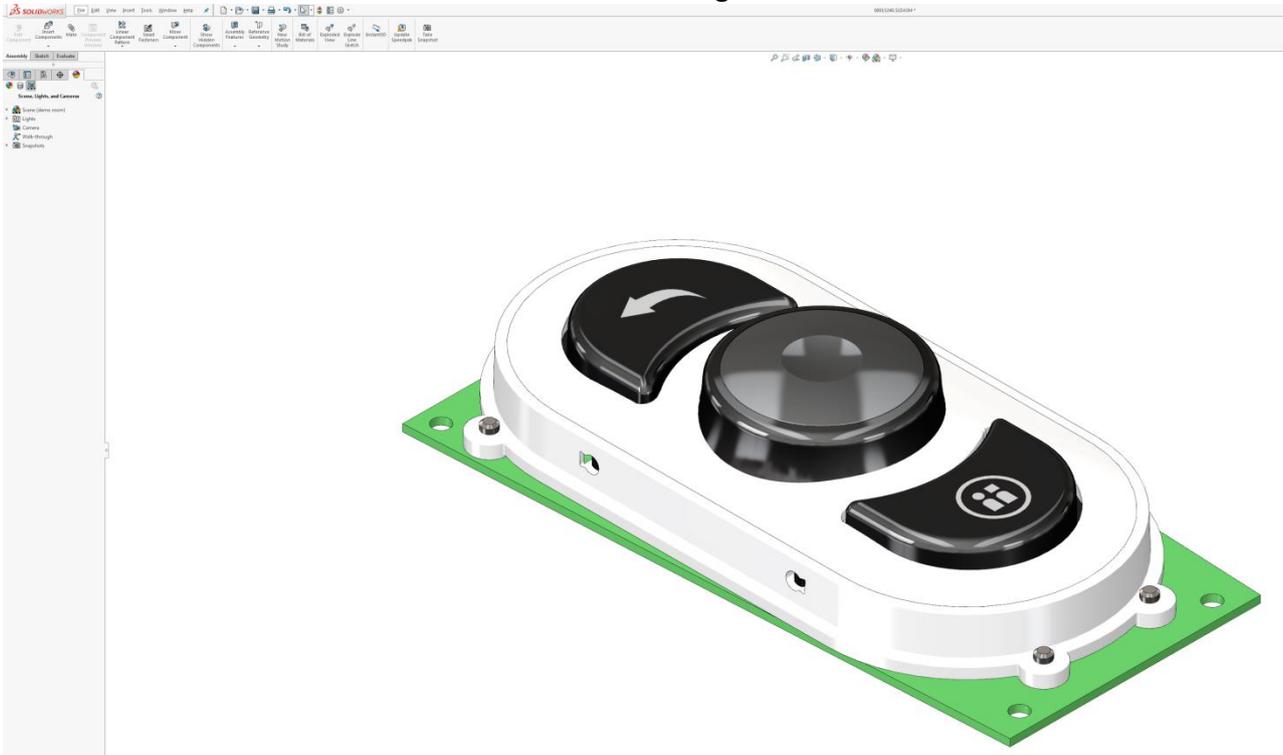
200% Scaling
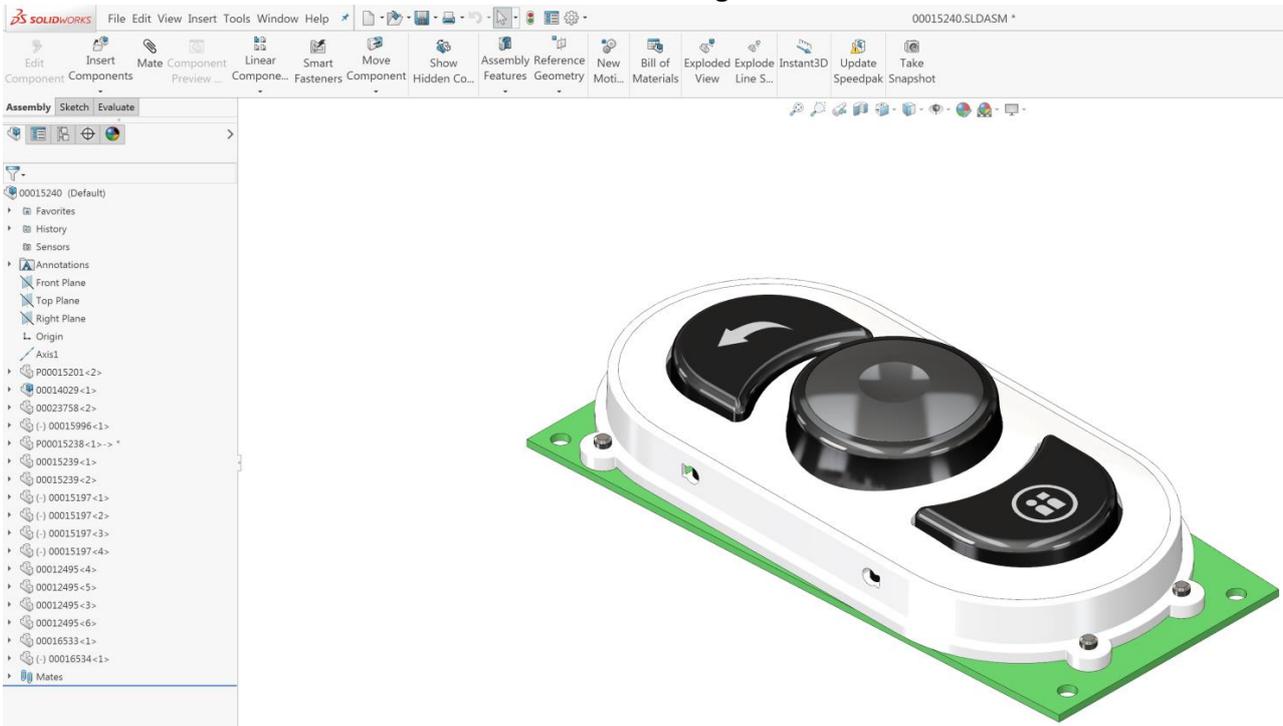
Background Colour/ Brightness

A common request amongst users is to vary the brightness of the interface, particularly for those of you working late to meet a deadline!

The option to change the interface brightness is located under Tools -> Options ⚙ ▾ -> System Options -> Color
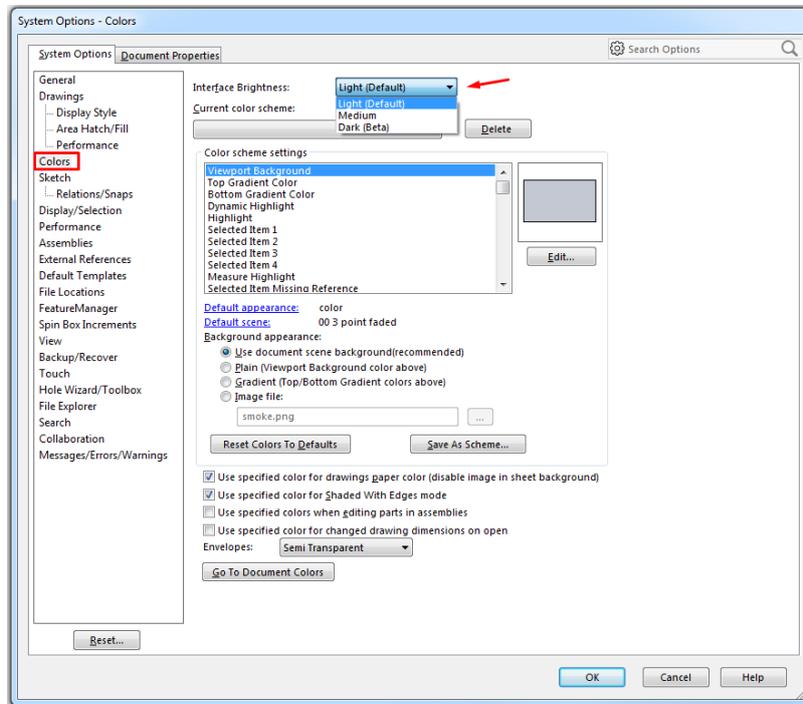
You can choose from 3 brightness levels currently (Dark still has some fine tuning needed) with the hope that more choice will be added in future if feasible.

Another good tip is to change the feature manager text colour within the same menu, within the colour scheme settings, the item to look for is "FeatureManager Design Tree Text", the default is a light grey but could be changes to pure black for instance to increase contrast.
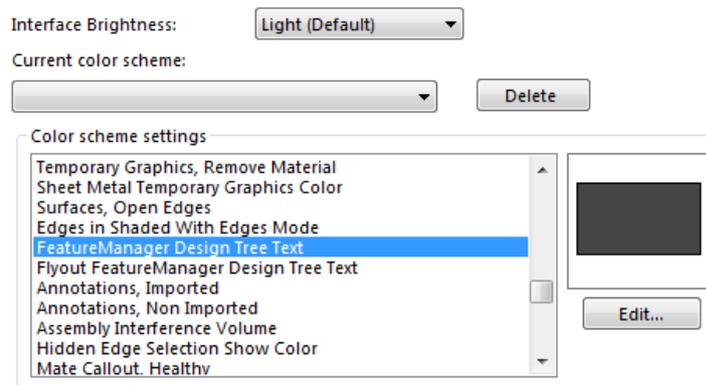
Further enhancements to improve contrast in various areas are very much on the development teams priorities' for the forthcoming releases.

The different Interface Brightness settings are shown below;
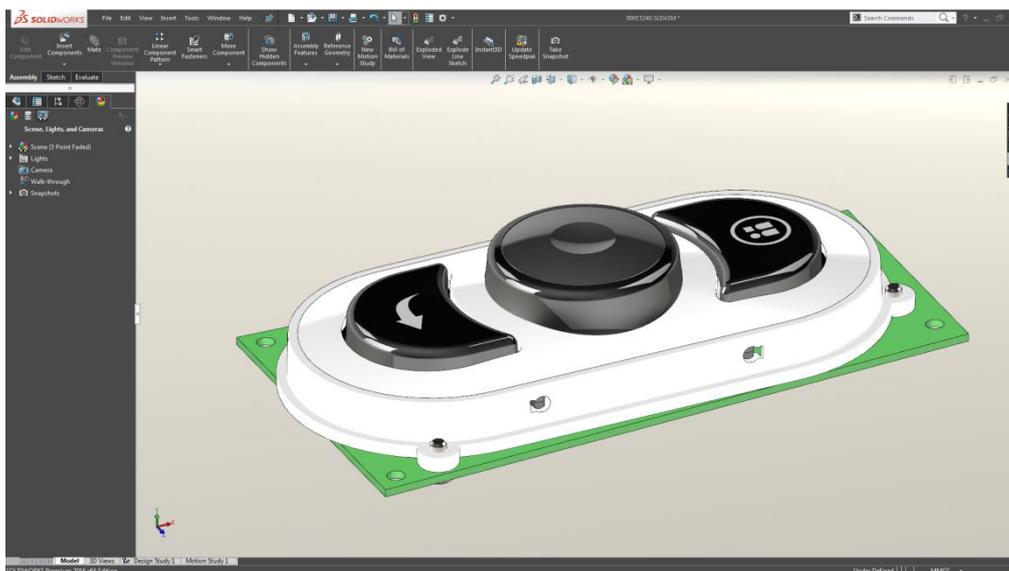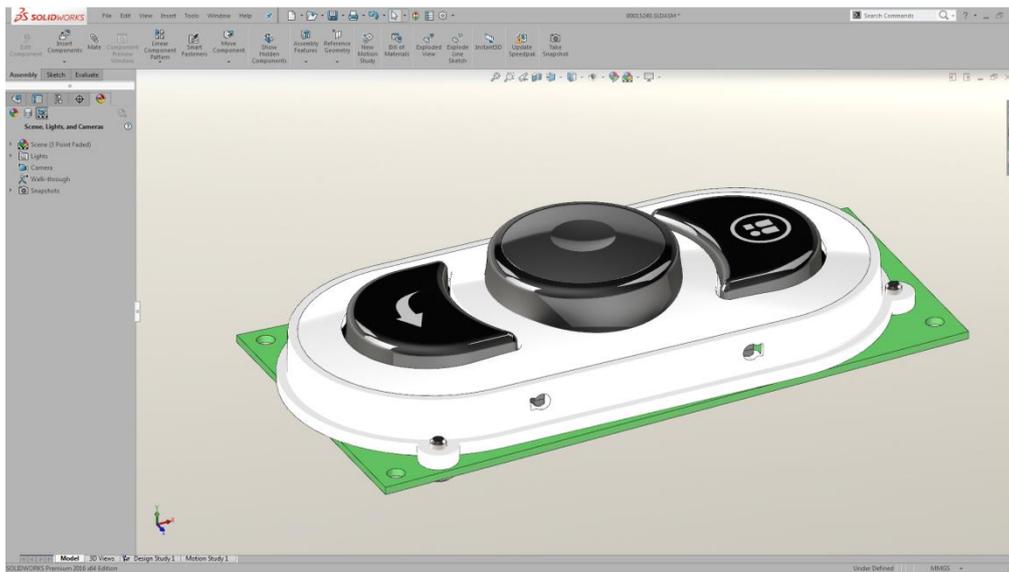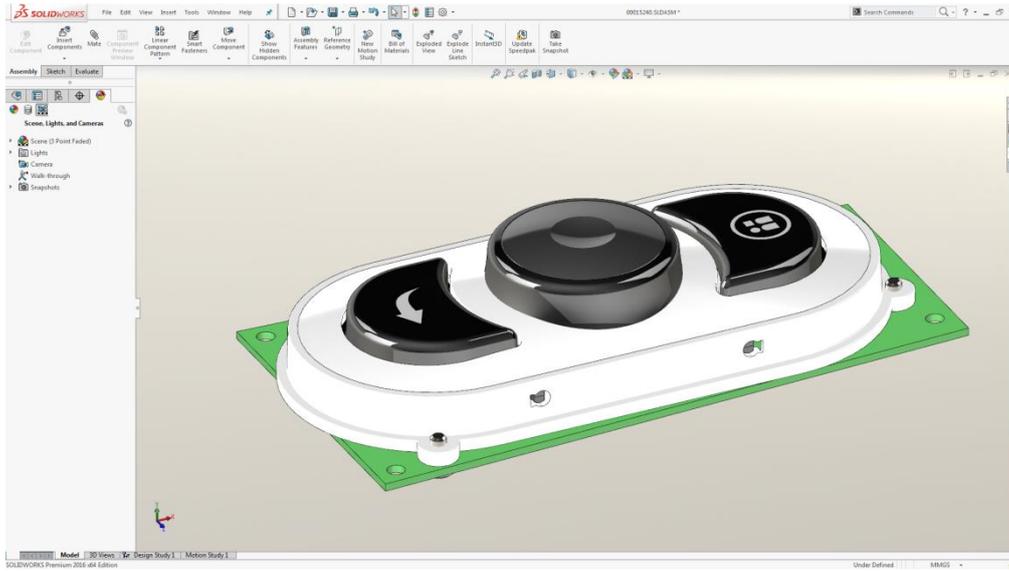
Bread Crumbs

The new breadcrumbs pop up gives easy access to information that you would otherwise have to dig through the Feature Manager to obtain. Here we could edit the profile of the Divot, the revolve feature created using that sketch or select; face, body or part level e.g. to add an appearance.

Having selected the face the breadcrumbs dialog can be brought closer to the mouse cursor using the letter D on the keyboard from here the various areas can be accessed. Below the icons are annotated for clarity. Edits are made by right clicking on the item you wish to modify/open.

In the Assembly environment the behaviour is much the same only selecting the same face gives us more levels of information.

We have access to additional information including mates and the ability to select any sub assembly levels along with the top level assembly, should we wish to open or modify those. Hovering over the mates show a preview of the selected surfaces and can be directly edited from a right click on the area you wish to edit/ open.

Hidden and Supressed Items

The icon used to hide items on a left or right click has been changed from the 2 difference glasses symbols [icon] [icon] in SOLIDWORKS 2015 to an eyeball symbol in 2016 [icon] [icon]. Also note there is now a noticeable difference between hide and show both in the icon and Feature Manager display.

Part 2015
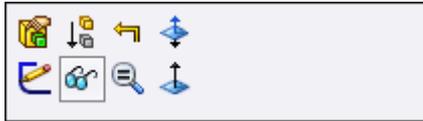
Part 2016

Assembly 2015- The icon is the same whether hiding or showing
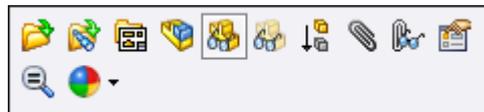
In SOLIDWORKS 2016 the icon Changes between hide and show modes, the line through the eyeball symbol indicates it will hide. This also carries through to the display on the Feature Manager

Show

Hide

Part- 2015

Part- 2016
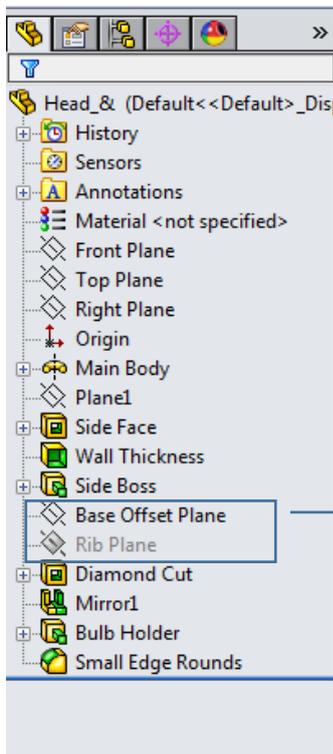
In both cases below the "Base Offset Plane" is hidden while the "Rib Plane" is supressed.

Notice the line through the plane in SOLIDWORKS 2016 shows clearly that an item is hidden rather than supressed. Contrast should be further improved in future releases.
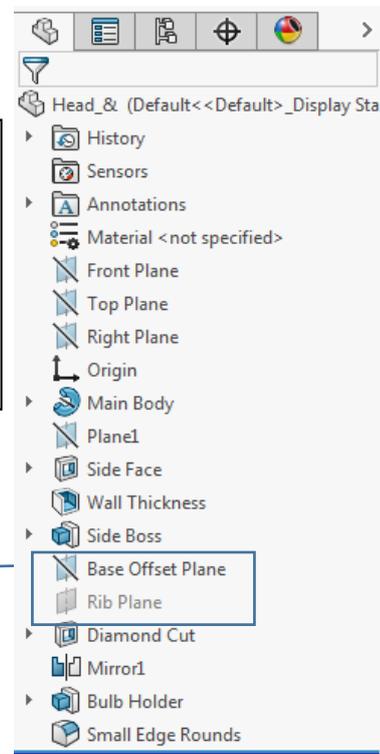
Assembly-2015   Assembly-2016
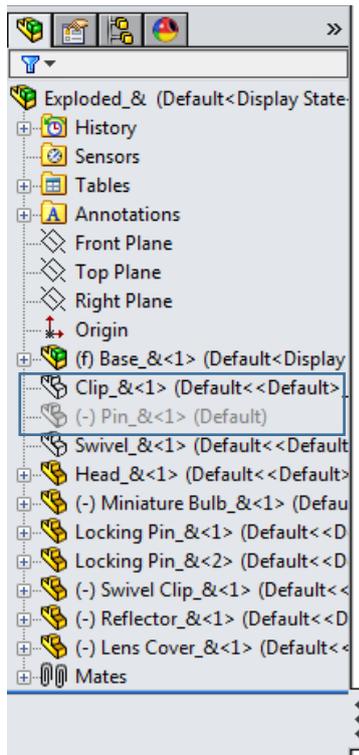
> Again here you can see the differences, "Clip" is hidden, and Pin is supressed.
>
> *Plans are in place to improve the contrast in all areas, please see below
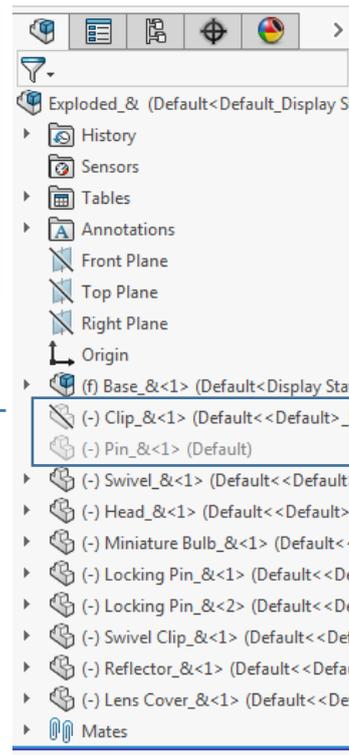
User Feedback

Or I want my colours back!

Already the amount of feedback for these changes in 2016 has been great, while some like the new interface others wish for something more akin to the icons in 2015 and previous. The current plan published by Tom Spine who is director of User Experience Design at SOLIDWORKS is;

SOLIDWORKS 2016 SP2 features were locked down in December however among other things this release will include;

- Improved text contrast in the Feature Manager Design tree: This issue is related to text colour becoming grey instead of black when switching the Interface brightness setting.

- Mate icons: A fix for an issue where assembly mate icons are not greyed out when an assembly part is suppressed.

- Other fixes: About 25 fixes for issues related to the user interface brightness settings, most about problems with the Dark theme.

For 2016 SP3, the development team are on track for;

- Colour icons: An option will be added to provide more colourful icons, as so many of you are asking for. The icons representing the most frequent and visible modelling features (solids, surfaces, sheet metal, weldments) will be recoloured to match the 2015 colour scheme.

- Background colour: As with the colour icons, there will be an option for a background colour that closely matches 2015.

- Hide/Show/Suppress states in the Feature Manager Design Tree: We will address the issues regarding the Hide/Show/Suppress state distinction in the Feature Manager Design Tee by using a similar approach to SOLIDWORKS 2015.

- The change will include using "wireframe" icons for hidden state and improving the colouring of some of the current SOLIDWORKS 2016 icons so suppressed icons are more distinguishable (for example making the part, folder, and solid body icons blue instead of grey).

We want your feedback!

It's clear that the user interface team want your feedback. The changes in SOLIDWORKS 2016 have been a major undertaking and inevitably there are some aspects that can be improved upon, In addition to getting involved on forums every SOLIDWORKS user can look for other enhancement requests or raise their own enhancement request via the customer portal. Try and include as much detail as possible about the change you are asking for and why. Alternatively contact support@solidsolutions.co.uk and we'll raise it on your behalf..

For instance I have raised my own enhancement request for the new sketch cursor, while the new cross hair style cursor is more precise and easier to use in my opinion than the old pencil I feel the ability to scale it would be nice especially for those with older eyes! SPR 931272 was created to request the ability to scale the sketch icon and SPR 916477 was already logged to allow the user to revert to the pencil icon. Our support team can add you to these requests which increase their priority with the SOLIDWORKS development team.

Below is a comparison of 2015 and 2016 when using the line tool

2015   2016

Ultimately the majority of new features come from your feedback so if you have an idea for a change or improvement to the user interface or anything else then please make sure your voice is heard!