Introduction

The 8.16 release is a significant point release introducing the new Push routing mode.

Push routing enables the moving of other tracks and vias out of the way to make room for the track currently being placed. It is fully design rule aware and can be toggled on/off with the existing FMR (Hug) routing mode.

Route editing is also now design rule aware making it fast and safe to clean up routes or maximise space on the PCB.

Visual DRC projects a viewport around the mouse, showing the enlarged clearances of all immovable objects near the track being routed.

Main Features

Push and Shove
Allows the track being placed to push other tracks and vias out of the way.

Visual DRC
View the DRC clearances of immovable objects around the mouse as you place routes.

Route Command Centre
Control route placement and editing behaviours from a single dialogue form.
PROTEUS DESIGN SUITE

Version 8.16 Feature videos:
- Route Command Center
- Push and Shove
- DRC Aware Editing
- Visual DRC
- Status Bar Update

Route Configuration
The Route Command Centre is the home for all route placement, editing and Visual DRC configuration options in Proteus.

It can be launched from the Tools Menu or, more commonly, via the ‘R’ keyboard shortcut. Importantly the keyboard shortcut can launch the dialogue form while in the middle of placing or editing a route meaning that you can make changes or adapt the routing modes at any time.

DRC Aware Editing
Track editing operations are now by default all design rule aware, allowing you easily make the most of the available board space and keep a tidy board layout.

Quickly and safely drag route to hug adjacent routes, obeying all of the specified design rules. If you need to, this can also be toggled on and off via keyboard shortcut or through the Route Command Centre.

Visual DRC
Visual DRC provides a viewport around the mouse and each object shows an expansion corresponding to it’s design rule clearance in an overlay.

This instantly lets you see whether the route being placed can move where you want it to go and then take action such as toggling push mode or changing track style to squeeze through a tight gap.

Routing Modes
There are now two main placement modes, namely Push mode and traditional FMR mode.

The former allows the route being placed to move other tracks (and optionally vias) out of the way while the latter is more akin to a hug mode which will obey design rule clearances but will not affect other objects on the PCB. Keyboard shortcuts enable you to seamlessly switch between modes at any time.

Status Bar
Status Bar messaging has been upgraded during route placement and editing to show live route lengths, routing modes and styles and net information.