

# The MTI Panemanager Widget

## *A 2-D paned window for a user configurable U/I*

Brian Griffin  
Mentor Graphics  
Wilsonville, OR 97070

Several years ago we were presented with the problem of having too many toplevel windows in our application, cluttering the desktop, not to mention making the management of these windows difficult for the user. The decision was made to take an approach seen in other IDE like tools where information was provided in tiled panes within the main application window. The large number of windows would be managed by controlling visibility and through the use of tabs. What was also needed was a way to easily rearrange these panes since the different application tasks required different focus of attention at different times. That coupled with user preferences required a flexible way to manage these configurations.

Our first approach used a grid approach where we defined a maximum of 5 rows and any number of columns. Panes could be placed in a number of configurations, but this turned out to be too limiting. The second attempt resulted in implementing nested panedwindows where sets of panes can be grouped into larger panes. This paper will present the basic functions of the widget and the added features that make this a powerful tool for application frame development, such as Pane Docking, Pane Zoom. Implementation details, problems encountered, and future development will also be discussed.

This widget implementation has been made publicly available, however, one feature is dependent on an unapproved TIP.