

## Graphical Front End

The Zmaster program is the standard front end to Zebulon and its utilities. It is an advanced pre- and post-processor which handles well the special needs of Zebulon. It is an easy to use cross platform product which is seeing active development.

NW Numerics has invested much effort to design an object-oriented programming interface for graphics which is independent of platform. This design has yielded an essentially identical interface and capability on UNIX/Motif and Windows NT operating systems. As new capabilities are integrated into the program, they are in fact simultaneously available for all supported platforms. The end result is, and will continue to be, a uniform and reliable rapidly advancing GUI with less bugs.

**Flat interface** The design philosophy for user interaction is action oriented. Modal interface features are avoided where possible, limiting the command depth to 2 levels at the most (no endless dialogs).

**User extendable** As with virtually everything in the Zebulon suite of programs, Zmaster is user extendable. Usually this will mean that user routines are added for batch meshing, or batch post-processing. The general design of these modules gives access to the graphical and file-based interfaces simultaneously, with general dialog input, etc. Rapid development of pre or post processing special applications is truly easy.

**Advanced post processing** Zebulon and Zmaster emphasize quality and adaptability in analysis. Post processing accommodates this with the availability of user material variables (named as you want them named), contour output by averaging, by material, by element, or by Gauss point (i.e. real values).

*Uniform interface*

*Windows NT*

*Unix/Motif*

