### **User Interface Guidelines**

When designing user interfaces for EwE you should try to adhere the following implementation guidelines:

## **Overall Structure**

- Triple-dots after a command (?) should only pull up a dialogues, i.e. New Scenario...
- Spelling: Ecopath, Multi-stanza??? QB etc
- · Always use wait cursors and status bar messages for lengthy operations
- · All texts should be specified in resources, NEVER in the code

### Placement of commands

- · Module commands, e.g. commands that apply to more than one form, are accessible from the menu.
- Commands that apply to ONE interface only should be placed on a toolbar above their form.
- · Module commands may be repeated in the toolbar above a form if this aids functionality

#### Menu Structure

- · Every word should be capitalized, except for prepositions and conjunctions
- · Every menu item should have a keyboard shortcut
- · Module-wide command should be present in specific module menu structure i.e. edit group, edit fleet

#### **Forms**

- · Forms should have toolbars for native commands, i.e. diet comp? Sum to one.
- · All configuration forms should be based on Ecospace parameters layout
- All configuration forms have scroll bars when too small to fit in docking area (see Ecospace parameters <u>AutoScroll?</u> setting)
- · Every form should be resizable; every control should have its anchors properly set (see Ecospace parameters)
- All controls should be consistently aligned and spaced (see Ecospace parameters)
- All controls should be accessible via the [TAB] key in an intuitive order
- Use of form icons should be consistent with the menu item that invoked the form
- There may be no usage instructions on forms or form toolbars; all help text moves to the manual
- · Grids should be accompanied by the quick-edit toolbar to export content to CSV for all grids, and read from CSV and set option to input grids only
- · Maps should have the quick-edit toolbar to export content to CSV for all maps, and read from CSV for input maps only
- Graphs should have the floating toolbar to zoom in, zoom out and reset zoom, and export to CSV
- Try to refrain from using Group boxes unless strictly necessary. Controls should be grouped using the standard EwE headers when possible (see Ecopath parameters)

### **Dialogues**

- Should be smaller than 600x400 800x600
- Every dialog must have default buttons assigned that consume [ENTER] and [ESC] keystrokes (Accept\_button = OK or similar, Cancel\_button = Cancel)
  - JS: [ENTER] rule dropped because 1) Grid edit controls need [ENTER] to commit and 2) [ENTER] is too easily pressed. However, [CANCEL] should be quickly accessible
- All controls should be consistently aligned and spaced (see Options dialogue)
- All controls should be accessible via the [TAB] key in an intuitive order (see Options dialogue)
- All controls should have an intuitive and preferrably unique shortcut key (see Options dialogue). This excludes default buttons (see above), default buttons never have keyboard shortcuts other than [ENTER] and [ESC]
- Only Ok/Cancel/Apply? buttons should have three dimensional borders
  - JS: rule dropped; following Windows guidelines
- Dialogs may not have a title bar icon
- Dialogs may be resizable
- There may be no usage instructions on forms or form toolbars; all help text moves to the manual

• Title bar should have the same text as invoking menu item

### **Grids**

- Ability to select range ([SHIFT] click), row, column or all
- Read-only cells should not be modified on delete/backspace/paste
- If grid shows indexed items such as group/fleets it must display an index column.

# **Navigation**

- · Only navigation tree leafs should invoke pages
- Only master nodes should be written in bold font JS: rule dropped; following Windows guidelines
- · Capitalize only on the first word of tree item texts

# **Toolbars**

- · Caps only on the first word
- Shortcut keys available
- Toolbars in EwE cannot be docked and undocked, and should not display a grip indicator
- Toolbars in EwE should not show repeated separators without controls in between

## **Values**

- Whenever an indexed item is displayed by name, the item index must be displayed as well
- · All number formatting should follow the number of decimal digits and thousands separator settings as configured by the user
- · All values display should follow the colour coding settings as configured by the user

# Reusing existing functionality

- Several styling issues mentioned above are already implemented and are yours to reuse from the ! <u>ScientificInterfaceShared?</u>.Controls namespace. Please consider reusing controls in this namespace before building your own, or inherit from these controls when building your own.
- The !ScientificInterfaceShared?.My.Resources module provides reusable strings, icons and bitmaps that we urge you to reuse.
- If you build your own controls from scratch, considering to use ScientificInterfaceShared.Style.cStyleGuide for implementing formatting and colour feedback.