

Release Notes for XXICC revision 0.0f

© 2013 John F. Beetem.

For the latest XXICC release and documentation, please visit xxicc.org.

This work is licensed under the Creative Commons Attribution-ShareAlike 3.0 Unported License.
To view a copy of this license, visit <http://creativecommons.org/licenses/by-sa/3.0/>.

No warranty is expressed or implied.

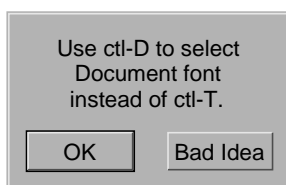
Raspberry Pi is a trademark of the Raspberry Pi Foundation.

This document describes enhancements and bug fixes for XXICC revision 0.0f, released 18 February 2013. 0.0f makes major changes to XOE, adding zoom in/out and enabling editing of figures and schematic diagrams.

1. XOE

- The “Save As” command now has keyboard equivalent `ctl-sh-S` instead of `F2`.
- Horizontal scroll now works. Use the pop-up scroll bar at the bottom of the window, `ctl-LEFT` or `ctl-RIGHT`, or the mouse wheel with `shift`.
- Added Zoom In and Zoom Out commands with keyboard equivalents `ctl-+` and `ctl--`. Since Zoom In/Out touches a lot of formatting code, I took the opportunity to make a number of improvements that had been on my list for a long time. As such, there are lots of changes to XOE’s formatting code, so don’t be surprised by anomalies. Please report any you encounter -- I’ll be especially grateful if you can tell me how to reproduce them.
- XOE now uses `ctl-D` to select the Document font instead of `ctl-T` to select Times Roman. I never liked `ctl-T` for two reasons: (1) “Times” is a specific font name rather than descriptive and (2) `ctl-T` reminds me of LaTeX’s “`\tt`” which selects a monospaced “typewriter” font. The `ctl-D` command selects whatever the user likes to use for documents -- by default Times Roman.

Changing `ctl-T` to `ctl-D` leaves `ctl-T` available for Transpose. For now, entering `ctl-T` brings up a dialog box:



Pressing either button closes the dialog.

- XOE now supports editing of figures and schematic diagrams. This is the first release that includes figure editing and it’s in preliminary form and has issues. See Chapters 8 and 9 of *The XXICC Anthology* for a user guide and implementation notes. To edit figures, you must run XXICC using the command “`xxicc fig`” instead of “`xxicc xoe`”. See §4 of *Installing and Running XXICC*.

2. G-SWIM

- The Ubuntu 11.10 version of X Windows sometimes has trouble with diagonal lines and arcs/circles.

The actual misbehavior depends on whether you're running with a GNOME, Ubuntu (Unity), or Ubuntu 2D (Unity 2D) desktop. 0.0f adds two options for working around the two problems. See *Installing and Running XXICC*, Section 4 "Running XXICC".

These problems do not occur on a Raspberry Pi running Debian "Squeeze".

- G-SWIM has new functions for drawing arcs. See §3.4 of *The XXICC Anthology*.

3. XXICC Objects

- We have changed the ARC XO. It is unlikely that anyone has document files using the old version, but to help track down bugs the new version has a different PSI opcode. ARC and other XOs used in figures are documented in §9.1 and §9.2 of *The XXICC Anthology*.
- We have removed the DIR XO. It is unlikely that anyone has document files using the old version.

4. Bug Fixes

- Fixed minor bug in GalaxC's Make. All GalaxC modules implicitly depend on `gxc.lib.gi`, so if you make a general change to `gxc.lib.gal`, GalaxC will automatically recompile all modules. However, 0.0e did not update a dependent object file's GMtime to match `gxc.lib.gi`. This meant that after a general change to `gxc.lib.gal`, GalaxC thought it needed to recompile modules every time instead of just the first time. The only way to stop this was to use the `-force` option. 0.0f updates object file GMtime correctly, so each module is only recompiled once.
- Previous versions of XOE allow the user to enter formatted text in the file open/save dialog box. The format control characters confused the file system. Rev 0.0f discards character formatting when the user finishes editing an open/save dialog box cell. The find/repeat dialog box allows character formatting, which is currently saved but ignored.
- Previous versions of `gxc.lib.gal` defined `round(x)` as `long(x+0.5)`. This only works for non-negative values of `x`. Rev 0.0f adds new PSI instructions `FROUN` and `DROUN` to provide `float` and `double` rounding operations which round to the nearest integer whether `x` is positive or negative. `round(x)` now returns a `float` or `double` value. To get a `long` result, call `iround(x)`.
- Fixed minor GalaxC bug: some nested macro calls did not compile, e.g., "for `x=1.49 thru 1.51 by 0.01 do printf("%4.2f", x)`" where `x` is a `float`.
- We have made progress on Issue #13: "XOE and G-SWIM: X Windows clipboard needs work". The X Windows clipboard should now save clipboard data after a window has been saved or closed, except when closing the entire XXICC program. I would like to make sure there are no memory leaks before considering Issue #13 closed.