## Appendix D: Known Bugs & Limitations

## Know Bugs:

- 1. Adding two or more links between two processors in the same direction will cause a display bug in which a "loop" will be created in the edge connecting the processors. This has no effect on the simulation.
- 2. If two processors share a bidirectional link (a link in both directions) and one of the links is dragged to a new processor a display issue can occur in which the edges are not drawn correctly. Moving the processor will fix the issue. This has no effect on the simulation.
- 3. The print function does not correctly size the network graph to the paper it is printed on and can be cut off or sized incorrectly.
- 4. In some cases when in full screen mode the file chooser and other dialogue boxes are not shown. Algorithms should be loaded before entering fullscreen mode.
- 5. The properties tab only allows integers to be input for a processor's ID. It should allow any unique string. A work around is to set the processor's ID by double clicking on it in the network editor window.
- 6. Some keyboard shortcuts that should be disable are still enabled while running the simulation.

## Know Limitations:

- 1. Only processors can be copied, cut or and pasted.
- 2. Undo/redo only work on changes to the network graph. They do not undo/redo changes to settings or properties.
- 3. The simulation visualization can only display a certain number of messages per tick. If multiple messages are sent down the same link during the same tick, not all will be displayed. This has no effect on the actual simulation.
- 4. If the display command is called multiple times in one tick, only the most recent text will be displayed. This has no effect on the actual simulation.
- 5. Panning only works if scroll bars are displayed in the network graph editing window (i.e. when the windowed is zoomed in on the graph).
- 6. Having a large number of processors send many messages every tick will cause the GUI to become unresponsive or even crash.
- 7. Statistics are combined for all algorithms running on the same processor, there is currently no way to view per algorithm statistics.
- 8. No distinction is made in the visualization between messages sent on different ports. If multiple algorithms on the same processor are running simultaneously and sending messages down the same link on the same tick, not all messages will be displayed (though they will be sent, just not shown).
- 9. Link IDs can not be changed after they are created.