Includes, references and addresses

Due to the scope of the project, certain ”conveniancy”-changes had to be made regarding location variables in the code. In practice, this means that a lot of include references and hardcoded portnames won't make sense on a newly installed or previously neglected system. Two such changes that require manual setup are the **static device address /dev/xbee** and the environment variable **$SAILINGROBOTS_HOME**.

The static device address is further documented in the separate document: ”Static USB device names”, located in the project installation folder. There should also be an install-script, setupSymlink.sh, that will setup the device name for you. Without these settings, the system cannot detect the xbee-module on runtime.

The environment variable , $SAILINGROBOTS_HOME, is used in makefiles to avoid relative include paths when compiling files from a now pretty complex folder tree – it simply refers to the path ”/home/sailbot/sailingrobot” (or ”/root/sailbot/” on the Raspberry). Running the system without the variable will result in missing references and general compiling errors. A script exists in the project installation folder for installation of the variable on desktops, though it is highly recommended that you read the script and apply the changes manually (symlink data to ”/etc/bash.bashrc”). Remember that the variable should point to different locations depending on the system type (desktop/raspberry). Also worth noting is that an environment variable only comes into effect upon terminal restart.

Makefiles

The project makefiles have been a constant work-in-progress and are still subject to structural improvements (the 2015-crowd contained no experts on makefiles…). Worth noting right now, however, is that many local makefiles are dependant on object files generated from the central /sailingrobot/Makefile make. If a test or local binary refuses to compile, **always run the main folder ”make all” as a first course of action.**