**Project Name:** Vapotherm

**Phase:** Beta

**Date:** 2/20/2015, 2/27/2015

**Review Facilitator:** Jim Peterson

**Attendees:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Title Organization** | **Functional Area Represented** | **Independent Reviewer** |
| Ossian Riday | Enercon | Software Engineer | N**o** |
|  |  |  |  |

**Scope of Review**

This software code review covers the following source code files:

|  |  |
| --- | --- |
| **Source File** | **Revision** |
| Abort.cpp | **3** |
| Abort.h | **3** |
| Command.cpp | **2** |
| Command.h | **3** |
| Main.cpp | **1** |
| mainwindow.cpp | **5** |
| mainwindow.h | **5** |
| TestScript.cpp | **3** |
| TestScript.h | **3** |

**Minutes & Actions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **#** | **Item** | **Actions** | **Resp. Person** | **Closure** |
| 1 | The lack of typedefs on enums was questioned. The name of the typedef was “name\_t” vs. “name\_e” with a typedef of “name\_t”. | none | JP | NA |
| 2 | The argument for the script commands (in Command.h) should be defined as a separate structure per command, with a union in the CCommand class. | None at this time – will be considered if a redesign were to be done. | JP | NA |
| 3 | The command parsing is case sensitive. While tthis was intentional, it may make sense to make the script language case in-sensitive. | None at this time | JP | NA |
| 4 | Standard script languages should be considered in any future redesign. | None at this time | JP | NA |
| 5 | The module mainwindow.cpp is quite large and should be broken up. In particular, the functions that are independent of the user interface should be moved. | None at this time | JP | NA |
| 6 | In CTestScript::readScriptFie() there is a dead line of code:  m\_version = “none”;  that should be removed. | Removed the line | JP | 2/27/15 |
| 7 | CTestScript::runTest() would be cleaner if the code for each script command were separated as a separate function. | None at this time | JP | NA |
| 8 | In CTestScript::runTest() the variables m\_argNumber and m\_charNumber are used as array indices, but the lower bound is not checked. | On further review, the lower bounds are checked when the commands are parsed in CCommand::parse() function.  No action required. | JP | 2/27/15 |
| 9 | In CTestScript::runTest() the commands that perform I/O also give the UI a chance to update. The other commands do not. | qApp->processEvents(); was added to the end of the command processing loop after processing each command. | JP | 2/27/15 |
| 10 | In the mainwindow:: constructor the connection of the signals and slots should be done at the very end of the contructor. | “connect” functions were moved to the end of the constructor | JP | 2/27/15 |
| 11 | Mainwindow.cpp line 513 is a dead line of code. | Line removed | JP | 2/27/15 |
| 12 | Mainwindow.cpp line 536:  QListWidgetItem \*item = m\_testList[i];  Item is not checked for NULL before use. | While it should not be possible, a check was added. If item is NULL the associated test will be skipped. | JP | 2/27/15 |
| 13 | The functions commPortSeleced\_A and commPortSelected\_B could have had a common implementation. | None at this time | JP | NA |
| 14 | In MainWindow:: readVapoThermResponse() there is a read into m\_inputBuffer, a static buffer to hold the contents of the read across calls. The read has a hard-coded size of 1024 in it. | The hard-coded 1024 was replaced by sizeof(m\_inputBuffer). | JP | 3/2/2015 |
| 15 | In MainWindow:: readVapoThermResponse() it is possible to overrun the input buffer by 1 character. | The maximum amount written was reduced by 1 character. | JP | 3/2/2015 |
| 16 | The function MainWindow::reloadScriptButtonPressed() need not be a QT slot. | Made the function private and changed the name to loadScript().. | JP | 3/2/2015 |
| 17 | The function MainWindow::reloadScriptButtonPressed() should take the script filename as a parameter to make the purpose clearer. | The filename parameter was added as a “const char \*”. Also changed the function to return a bool – true if successful, false otherwise. | JP | 3/2/2015 |

Reviewed & Approved: \_\_\_ Ossian Riday \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reviewed & Approved: \_\_\_\_Jim Peterson\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_