## c++ Hardware Controller Change Request Log:

## A space to put Ideas / Requests for Middle to Large Scale Code Refactoring, Updates and Extensions

We need a shared place to capture ideas for c++ code refactoring / updates /

To start with I have created a document here. [\\fed.cclrc.ac.uk\org\NLab\ASTeC\Projects\VELA\Software\notes\c++\_Change\_Requests.docx](file:///\\fed.cclrc.ac.uk\org\NLab\ASTeC\Projects\VELA\Software\notes\c++_Change_Requests.docx)

We will look for a longer term solution based on experience using the python modules / Github / other project management tools. For now please can you update this table from your own notes.

Please add your ideas / requests to this list.

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| --- | --- | --- | --- | --- |
| **Date** | **Person** | **Importance** | **Notes** | **Completed** |
| 7/10/16 | Duncan | ? | We need to rationalise the structs / enum namespaces and create python modules that enable you to import to just structs and enums definitions. | no |
| 7/10/16 | Duncan | Hi (will be required for commissioning) | We need python module checking scripts to automate checking each function works. These should include offline/online checks. I propose that the person who wrote the HC writes the test script | no |
| -/08/16 | Tim/James | Lo | Option for the constructor. Have an input variable that lets you choose whether or not to have monitoring and init chid() on setup. They take time and some people don't want them  Yes: We should have constructors / static methods to create objects that do no EPICS work | Magnets YES |
| -/07/16 | Tim | Lo | Merge degaussing config file into main magnet config. This involves changing the config file readers and magnet objects. | yes |
| -/08/16 | Tim/Alex | Me | Config file locations: Change location for virtual/real config files | yes |
| 11/10/16 | Duncan |  | I’m not happy with the way dividing the machine up is implemented – if I add a function to the magnet controller, I think I have to add it to every different version of the controller. I think we should be able to devise something that only needs to be changed in one place… also, maybe I misunderstood what changes have been made… (?) | No |
| 11/10/16 | Duncan | Lo | On building - can all the codeblocks projects make a copy of the compiled dll (py) to one folder containing all the modules ?  I have added a bin folder at the highest level, write pyd files to bin/Release | Started |
| 02/11/16 | Duncan | Lo | Screen – potentially need a lot of work, but we won’t know until we have actual screens to move through the control | No |
| 02/11/16 | Duncan | Lo | Cameras will need a lot of work when, but we need the new system / test system up and running before we can properly start this | No |
| 07/11/16 | Ben | Lo | As well as having bespoke function names to return a hardware object reference can we have a function that takes variables (enums) defining the mode and are for the hardware controller. | No  Started for magnets |
| 11/11/16 | Duncan | Lo | We have a VELA\_ENUM namespace, it needs to change to VELA\_CLARA\_ENUM or something better | No |
| 11/11/16 | Duncan | Lo | Include Timestamping, for CLARA it will be pulse numbers, with data  Have to wait for systems to be online before we can begin to code this, but maybe we can think about it a bit now? | No |
| 11/11/16 | Duncan | Lo | Why is the link to the hardware controller python modules  [\\fed.cclrc.ac.uk\org\NLab\ASTeC\Projects\VELA\Software\VM-Controllers\VELA-CLARA-Controllers](file:///\\fed.cclrc.ac.uk\org\NLab\ASTeC\Projects\VELA\Software\VM-Controllers\VELA-CLARA-Controllers)  We probably need to find a better place that “VM-Controllers” | No |
| 17/11/16 | Duncan | High | HCs in offline mode should still be able to set parameters as if we were in online mode, but with no EPICS | No |