

Current Community Firmware Menu Structure

At CF6, Pre4

(As understood by Thinkersbluff, 6 March 2021)

Purpose

- To provide one model of the current Community Firmware menu structure, from which decisions might be proposed & evaluated, re: Issue#121

“All models are wrong. Some models are useful...” R.Box.

Approach Used

- Current .bmp files in DGUS project captured into this model & aggregated into abstract “classes” using Affinity Mapping, according to one perspective on their apparent purposes, as seen by Thinkersbluff – Slides 4-6
- Titles of proposed aggregations used to help build a 1-page hierarchical view of the current menu system, which traces to the actual implementation.
– Slide 7

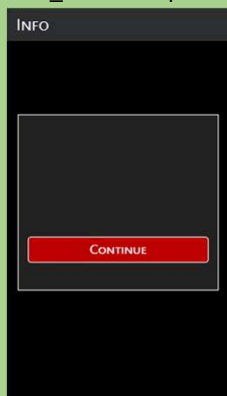
NOTIFICATIONS

Intervention Required at Printer

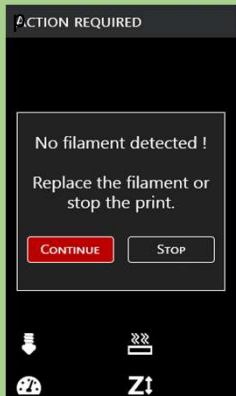
36_E_printfinish



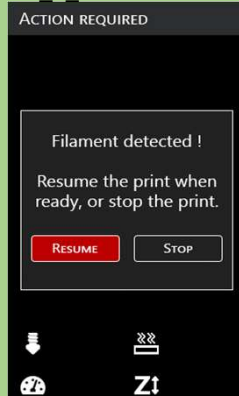
63_ActionRequired



34_E_filamentuseu



35_E_filamentload



Notice of "Fatal*" Error

* Must Power-Off to Recover

64_KillScreen



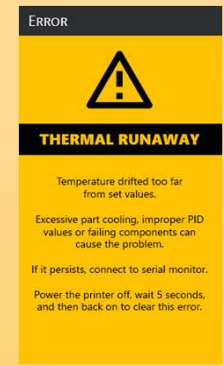
58_heatingfailed



59_ThermistorError

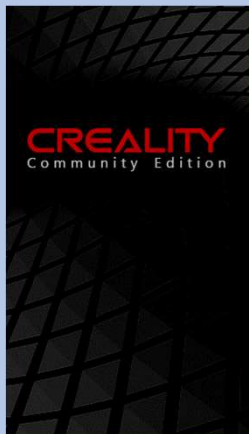


57_thermal_runaway



"System Busy, Please Wait"

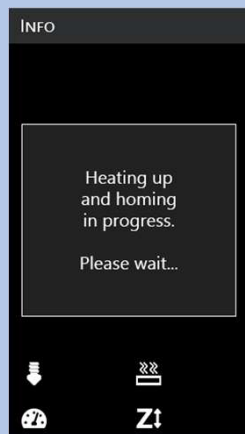
00_Starting



+ "Loading Bar" animation overlay



61_E_Autohome

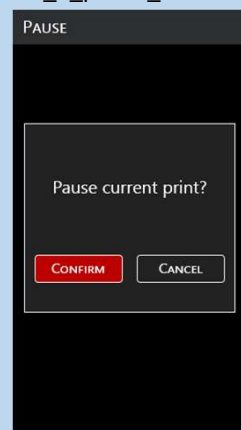


+ "Throbber" animation overlay

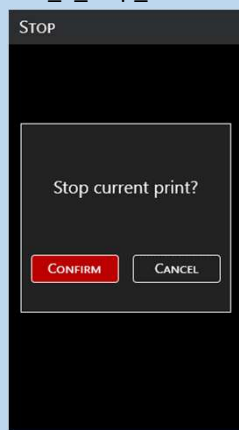


"Confirmation/Permission" Required

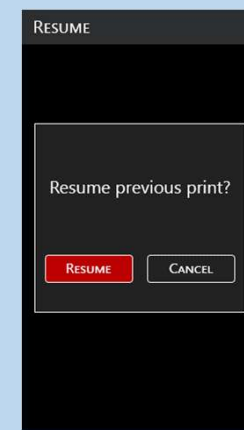
38_E_pause_confirm



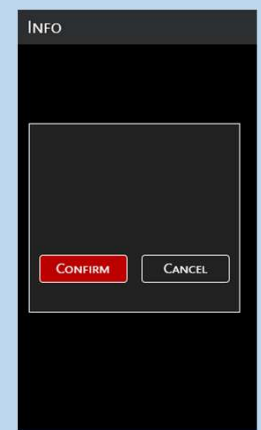
40_E_stop_confirm



54_E_powercontinue

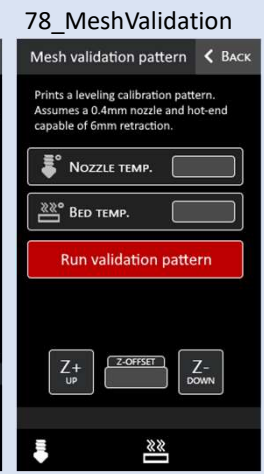
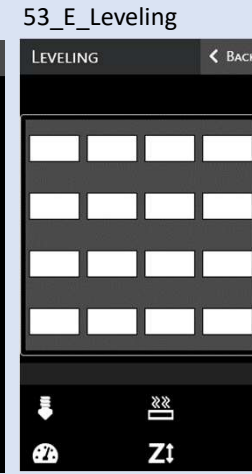
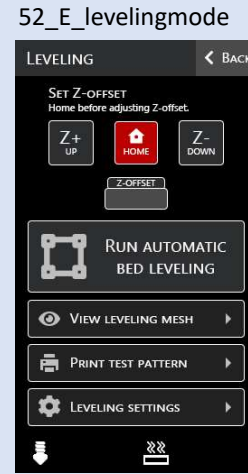
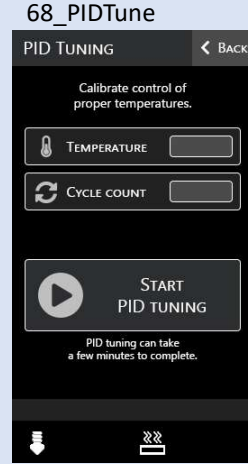
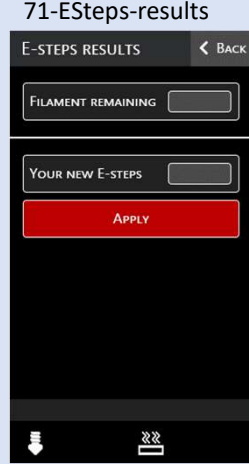
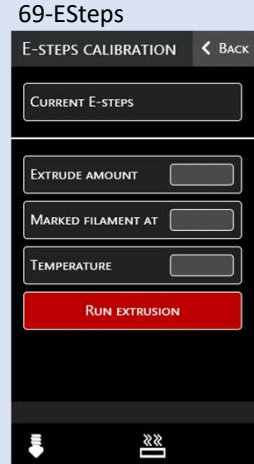


66_Confirmation

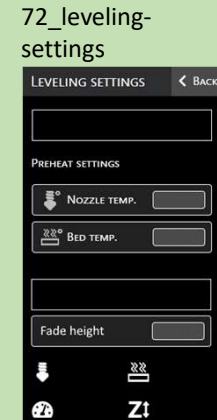
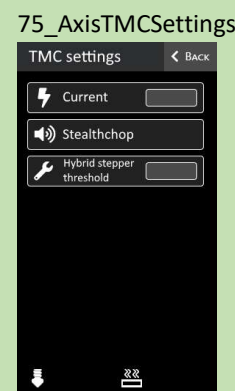
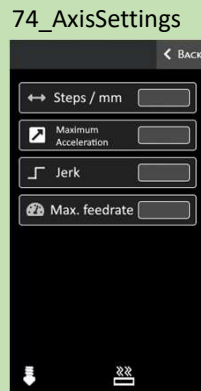
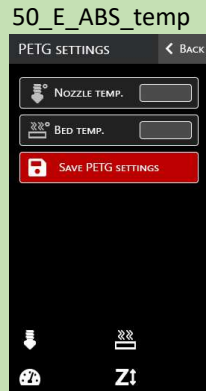
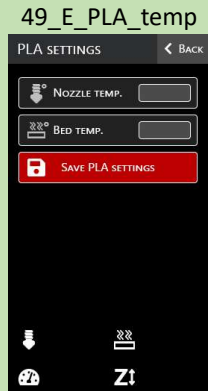


Review/Modify Printer Configuration

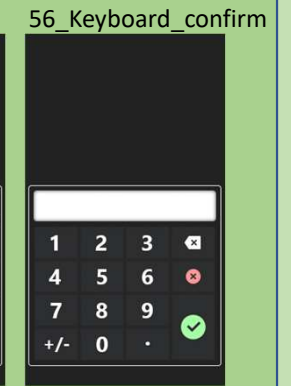
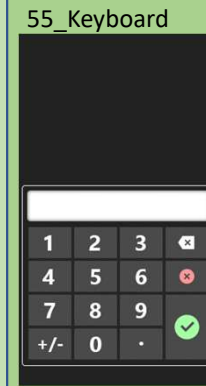
"Perform Printer Calibration" Screens



Parameter Entry Screens



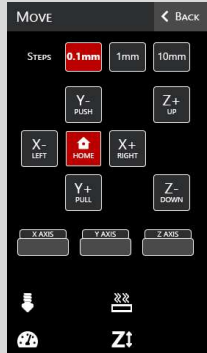
Pop-Up KeyPads



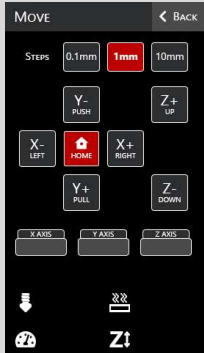
“Modify Physical State of Printer”

Move Print Head/Print Bed

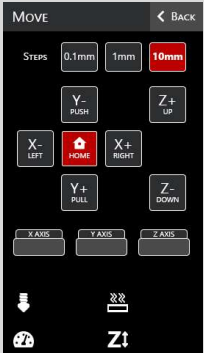
45_E_moveaxis01



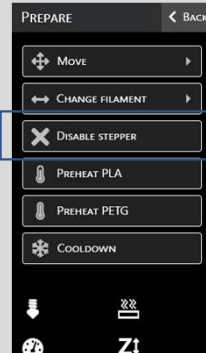
44_E_moveaxis1



43_E_moveaxis10

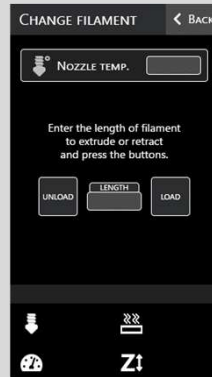


42_E_prepare



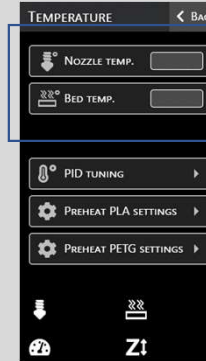
Load/Unload Filament

46_E_feedreturn

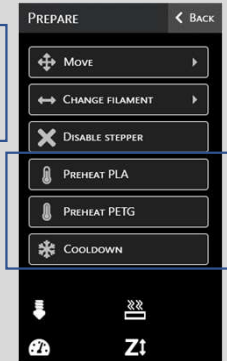


Heat/Cooldown Nozzle, Bed

48_E_temp



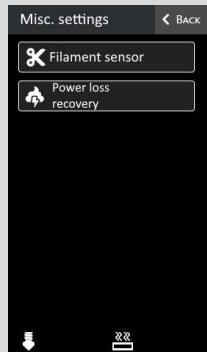
42_E_prepare



“Modify Software State of Printer”

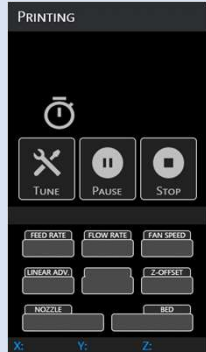
Enable/Disable Features

77_MiscSettings



Intervene in Active Print

37_E_printing



39_E_printresume



41_E_adjust



70-TuneFWRetract



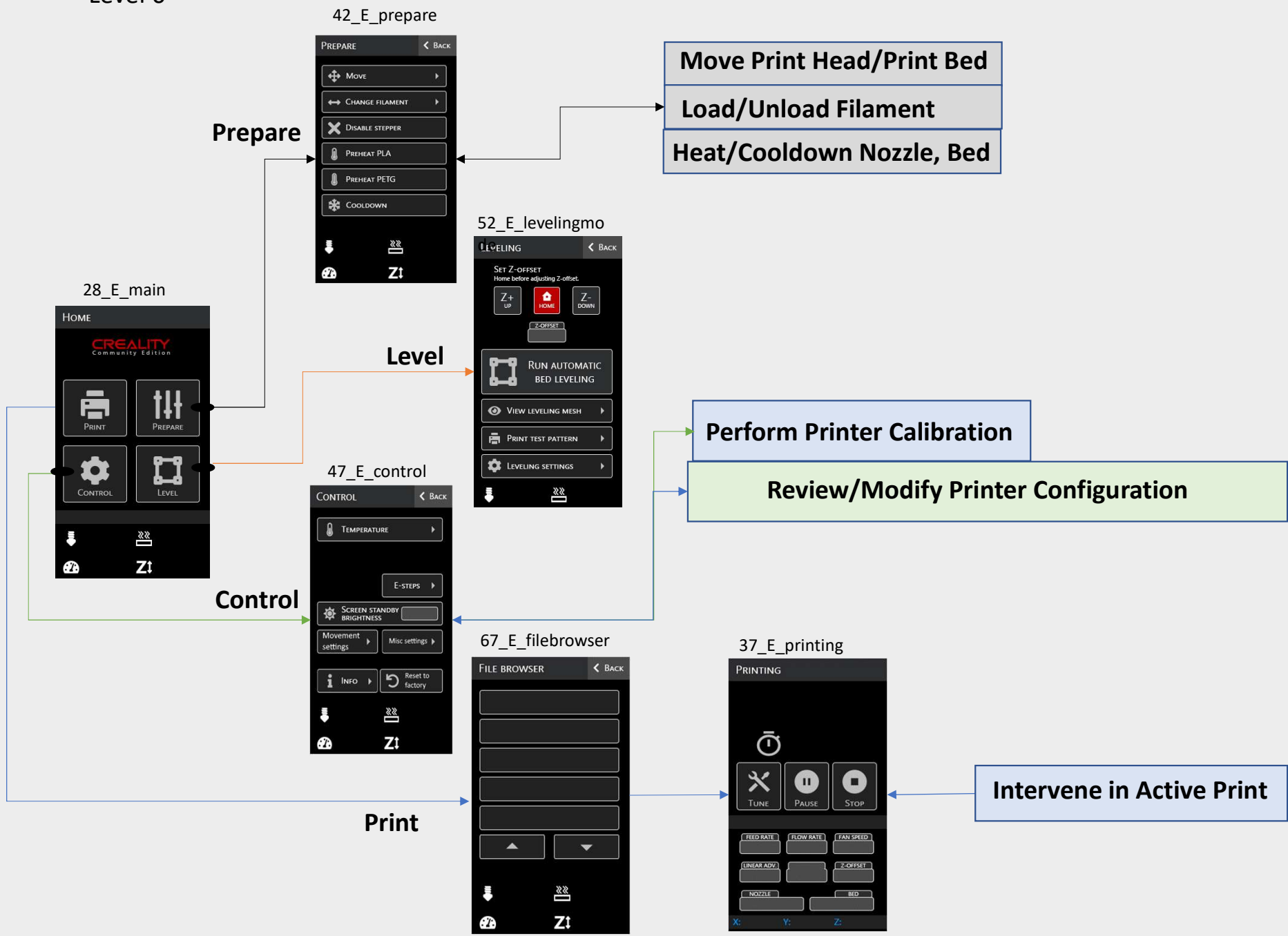
Navigation Menus

Level 0

Level 1

Level 2

Level 3



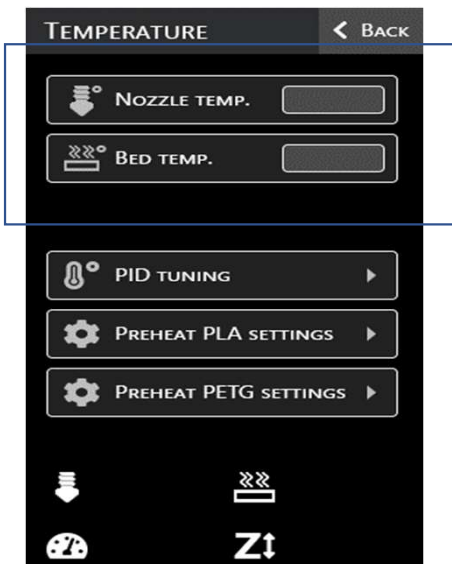
NOTES:

1. After completing this model, Thinkersbluff continues to believe that:

1. “Control” should be renamed to properly reflect its actual functionality, which is to allow users to program the printer with persistent parameters that govern its performance.

e.g.: “Configure” (If each workflow is to be given a 1-word name in the imperative form, as it is presently.)

48_E_temp



2. These two settings (Nozzle Temp & Bed Temp) should be removed from this menu.

- Values entered here are not meant to be “persistent” if power is cycled off/on.
- Any calibration functions requiring temperatures to be set before running should instead include that capability as part of the calibration function.

NOTES:

2. The “classifications”/aggregations of function proposed by Thinkersbluff herein are certainly not the only logical abstractions. Readers are in fact encouraged to challenge and explore alternative arrangements, because this tool is intended to expose (i.e. to convert from implicit to explicit) our individual understandings of why the current design should or not remain as it is, or change to a specific something else.

NOTES:

3. The slide size in this file was set to 11"x17" paper, to help anyone who prefers to print these out. Hopefully, that wasn't a counter-productive thing to do...

4. Some of the current screens contain a mix of data entry and menu navigation functions. If Thinkersbluff did what he meant to do, then those hybrid screens should appear more than once in this model, with the applicable subset of the screen highlighted within a dashed box.

5. Some screens in the current design may be built at runtime, by populating templates. Thinkersbluff may have overlooked some current screens, not knowing whether those templates are currently used or in what ways...