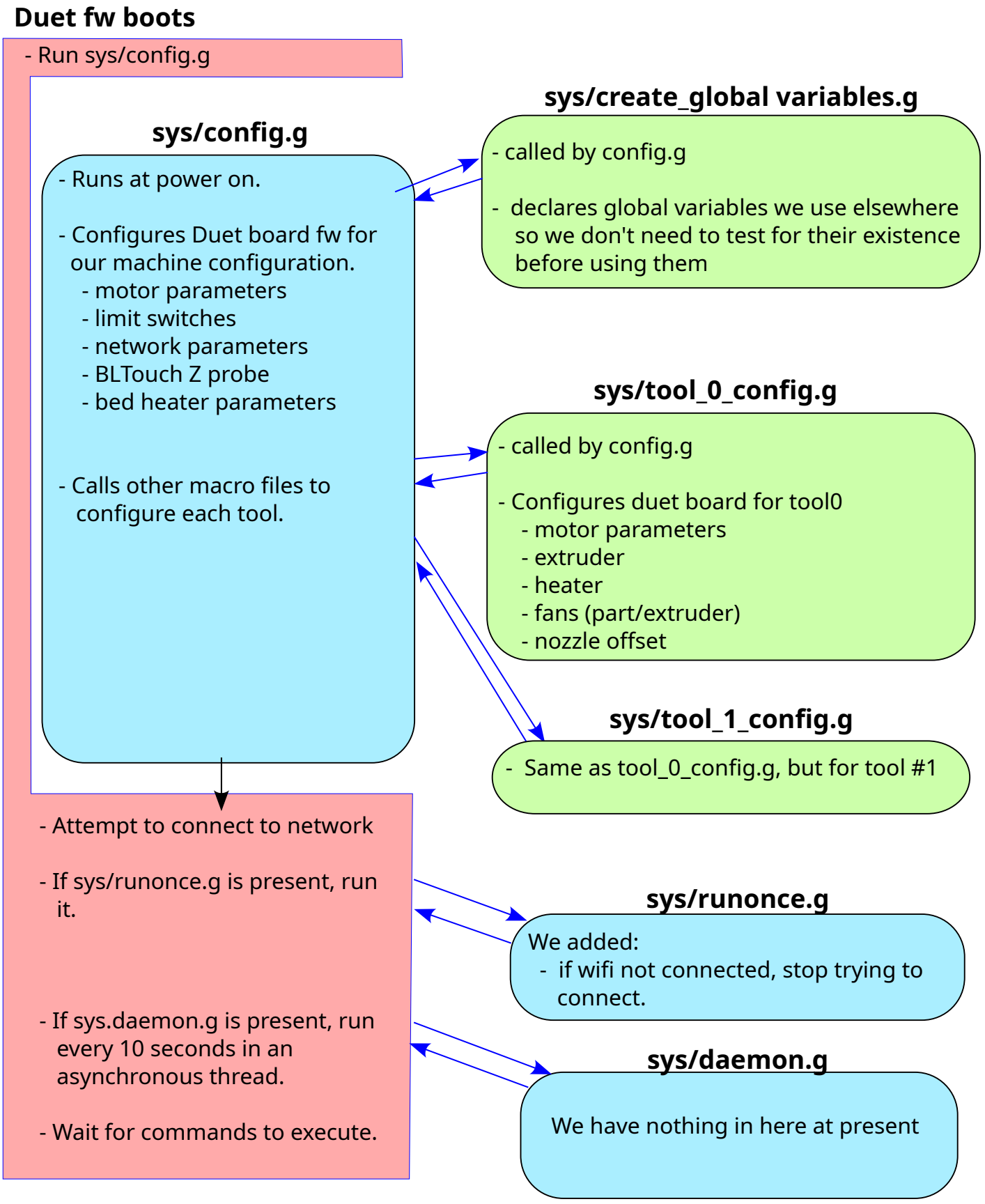
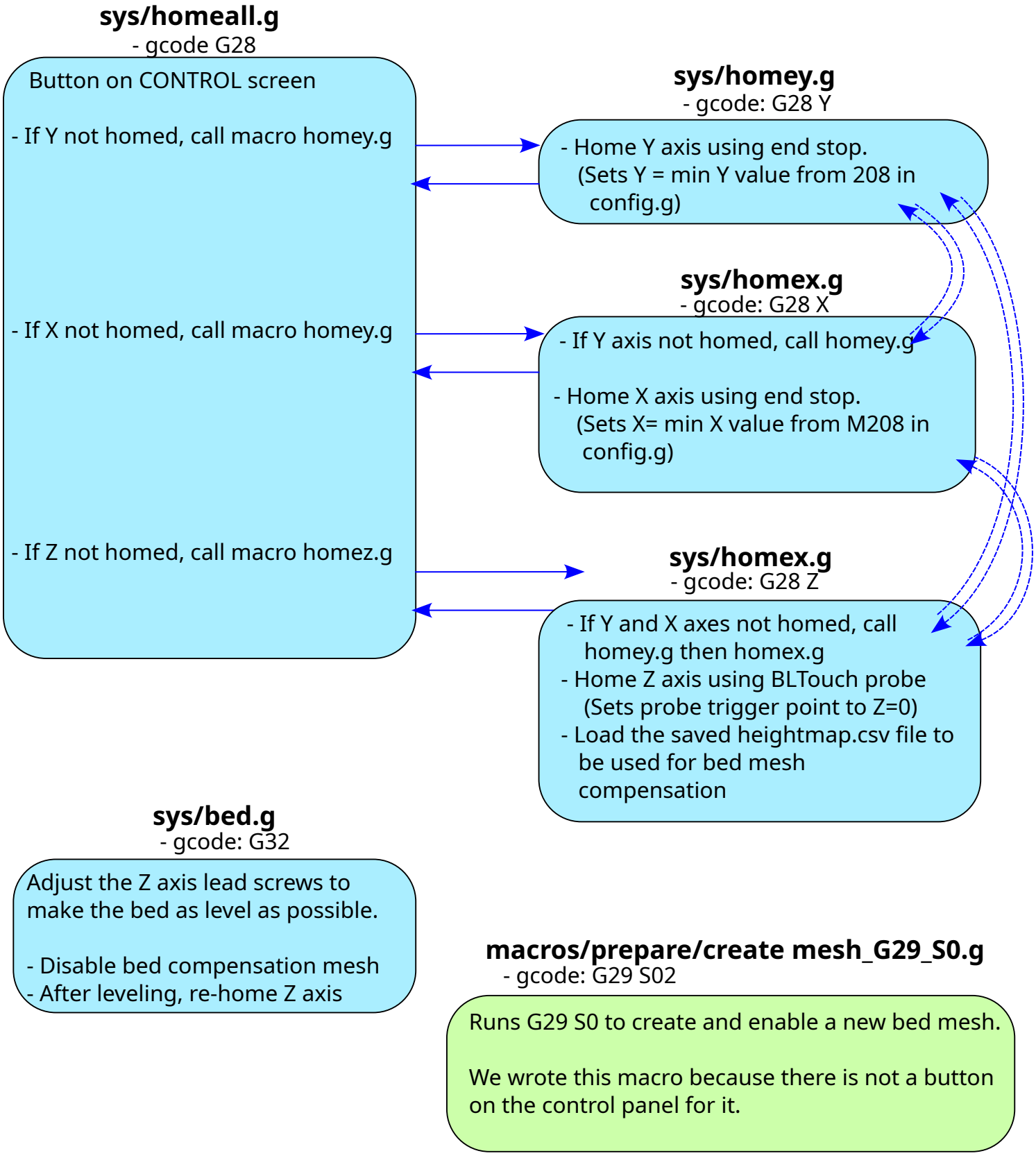
Automatic at power-on

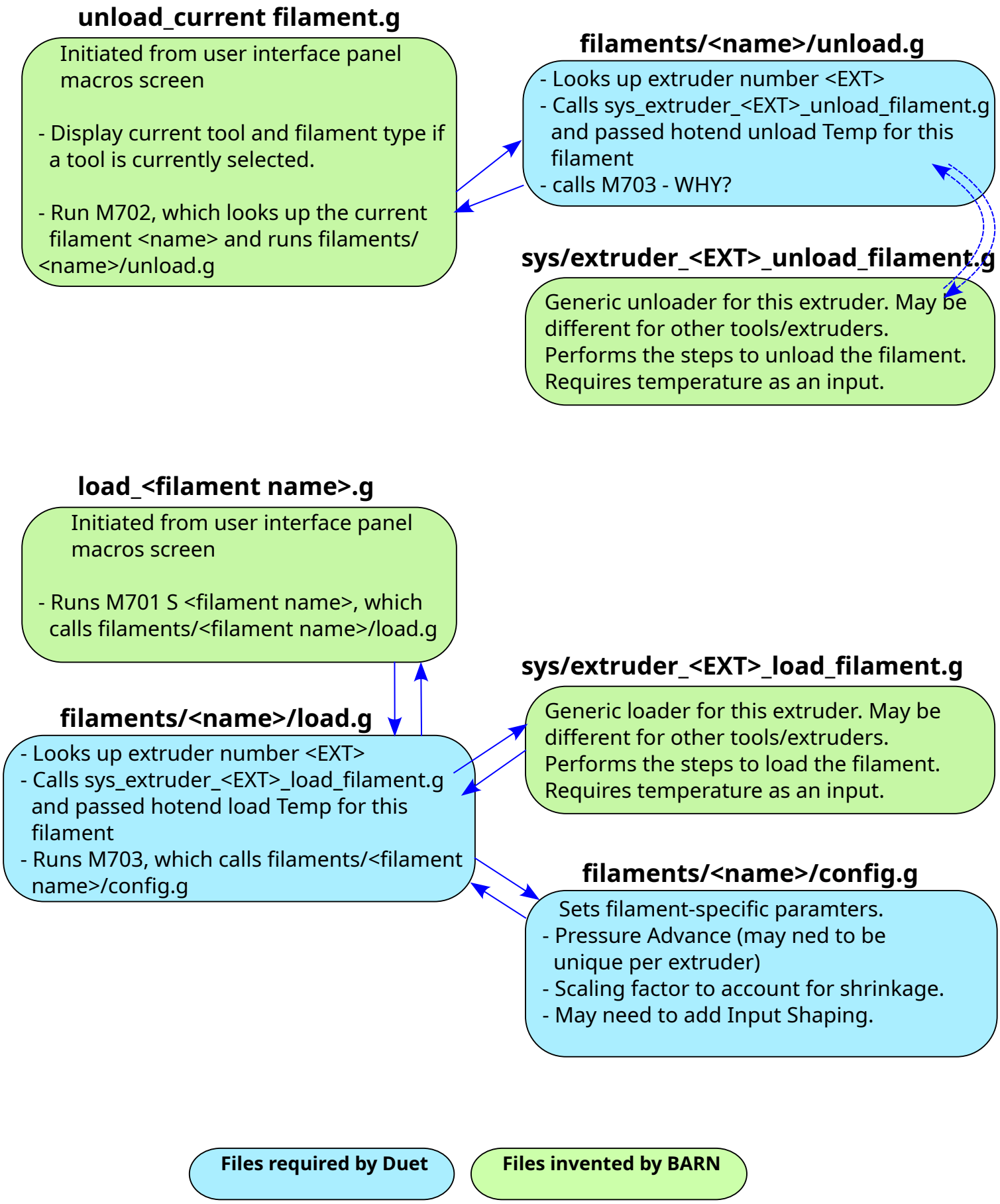


User initiated after power-on



Filament Change Macros

All are located in the **Macros/load_unload_filaments directory**



Tool Change Macros

sys/tfree0.g

Actions to do with tool 0 before it is released.
- Park the tool, set temperatures to standby, turn off fans?

sys/tpre0.g

Actions to do with a new tool before tool 0 is selected
- ??

sys/tpost0.g

Actions to take with a new tool after it is selected
- Grab tool with tool changer.
- Turn on heaters and fans
- Unretract filament and wipe?
- Return to starting location?

Files required by Duet

Files invented by BARN

Printing Macros

print file from slicer

Required:
- Sliced for Mark4 printer.
- Must select a tool.
- M0 at end of job

Optional:
- Home all axes
- Create height map
- Pauses

sys/start.g

If present, run before sunning print file gcode.
We added:

- Collect time for start of print.
- Collect name of file to be printed

sys/pause.g

If present, run when file has a pause or the print is paused form the printer interface.
The default has:
- Drop the bed, retract a bit of filament, move the print head to a known location

sys/resume.g

If present, run when a print is resumed after a pause.
The default has:
- Go back to the print location, return to the previous print move, unretract the filament.

sys/cancel.g

If present, run when a print is cancelled.
We do not have this file at present.

sys/stop.g

If present, run when file has M0 at end of job.
We added:
- Capture print end time.
- Log start, end times and print name to file.
- Drop the bed, retract the filament, move print head out of the way, turn off heaters and fans.

Files required by Duet

Files invented by BARN

Debug Macros

All are located in the **Macros/debug directory**

allow cold extrude.g

Runs M302 P1 to allow the extruder motor to turn even if the hot end is not hot

move_without_homing.g

Runs M564 S0 H0 to allow axes to me moved even if the system has not been homed.

clear heater fault _M562.g

Runs M562 to clear all heater faults.

report_IP_Address.g

Print a messagfe showing the IP Address of the machine

clear_logfile.g

Pauses logging, deletes the file: m sys/ eventlog.g and restarts logging.

Files required by Duet

Files invented by BARN

Print Prep Macros

All are located in the **Macros/prepare directory**

create mesh.g

Runs M29 S0 which is the bed mesh creation and loading command.

Files required by Duet

Files invented by BARN