Auto filament change

Feature Name: Auto filament change

Feature Name in Annotation: FILAMENT_CHANGE

Source of Information

Releaselog, pull requests, commits, ifdefs with feature annotation name

Strategy Used:

Feature is identified from the latest release log first. The release log also provides the pull request and commits linked to the feature (see the links and tables below), Ifdefs are also used for speeding up feature location.

Feature Release Version: 1.1.0 - RC7

Time took to Identify and Locate the feature: 0.5 hour Time took to Understand the Implementation: 1 hour

Feature Description

Video demo: https://www.youtube.com/watch?v=OkZaL5J2GsQ (Flash 3D 200 Automatic change filament)

In order to auto replace the filament. The user need to enable this feature in the LCD display and enable the feature by uncomment the code in "configuration_adv.h". Line: 682 The user can use this feature by choosing change filament function in the menu or send "M600" Code. The the printing process will be paused and the extruder will back to home position and the old filament will be unload. Then the user need to manually replace the filament and confirm the change by press the button on the control panel.

Feature Information and Statistics:

PR No.	Merged Time	PR	Commits	Files	Line Added	Line deleted
#3662	3 Jul 2016	Rewritten FILAMENT_CHA NGE_ENABLE feature	3	26	791	253

Ratios of sources (%)

RL	PR	СМ	Ifdef	DK	СС	SC	GD
50	20	10	20	0	0	0	0

RL: Release Log; PR: Pull Request; CM: Commit, Ifdef: Ifdef Expression; DK: Domain

Knowledge; **CC**: Code Comment; **SC**: Source Code; **GD**: G-Code Documentation.

Pull Request Links:

https://github.com/MarlinFirmware/Marlin/pull/3662/files

Feature Characteristics:

Feature Name	LoFC	SD	TD	Completely Wrapped by ifdef
Auto Filament Change	397	15	2	Yes

Feature's relevant historical data

Related pull request & issue:

https://github.com/MarlinFirmware/Marlin/pull/3662 (Merged)

https://github.com/MarlinFirmware/Marlin/pull/3638 (Closed)

https://github.com/MarlinFirmware/Marlin/pull/2926 (Closed)

https://github.com/MarlinFirmware/Marlin/issues/2933 (closed)

https://github.com/MarlinFirmware/Marlin/pull/1882 (Merged)