

August 12 2023. - About GEGL Effects code base

Hello, if you are reading this I assume you have interest in maintaining GEGL Effects or are studying its source code out of curiosity. GEGL Effects CE, my layer effects engines code base can be divided into three categories. Critical Day One Operations (1), Extended Operations (2), and Alt Text Styling Operations (3).

When you first look at the code you will see 19 folders each containing a GEGL Operation of mine. These are all the individual operations needed for GEGL Effects. You may notice some folders contain the text, "HO", and "_D" at their end. Below explains what that means.

HO = Hidden Operation, - which means the operation is hidden from Gimp's GUI.

_D = Duplicate, - meaning another Github repo of mine is where that plugin originated from and the plugin is still present on said other repo.

The folders associated with Critical Day One Operations.

The operations in these folders have been in GEGL Effects since its debut in May/June 2022 and are needed for GEGL Effects to work proper. GEGL Effects should never be more minimal then this.

gegl_effects
special_outline_HO
bevel
inner_glow

Four critical operations that GEGL Effects cannot work proper without. From a technical perspective, GEGL Effect's .c file calls hundreds of other GEGL Operations. Special Outline is the shadow, outline and glow of GEGL Effects that is a recreation of Gimp's drop shadow filter but with a lot more features. GEGL Effects should never use gegl:dropshadow as zzstrokebevelimage AKA (special_outline_HO) is more advance and suited for it. However, before April 2023 GEGL Effects used default drop shadow.

Bevel and Inner Glow are independent filters of their own that do more in stand alone mode as opposed to their baked in versions in GEGL Effects. If you are not familiar with a bevel or inner glow effect; just look it up online or test it yourself.

The folders associated with Extended Operations

glass_over_text
shiny_surface_HO

These Operations were added to GEGL Effects in mid 2023. Shiny Surface is a container calling “gegl:sinus” in a special way to create a shine effect on text. Glass Over Text is a independent filter of its own doing a alternative shine effect different from shiny surface. Like bevel and inner glow, it does more in stand alone mode.

The folders associated with Alt Text Styling Operations

In August 2023, GEGL Effects was given the ability to call other independent major text styling plugins. Only two of these operation folders “major_plugin_switch_HO” and “long_shadow_policy” are hidden. They are containers that call all other plugins listed here. The hidden operations allow them to be called in GEGL Effects without needing to update any of the stand alone plugins. I have put in parenthesis what each of these operations do.

major_plugin_switch_HO (hidden operation to call major text stylers)
long_shadow_policy_HO (hidden operation to call extrusions and long shadow)
threshold_alpha_2_D (hidden operation like curves on alpha channel)
sharp_bevel_D (a stand alone sharp bevel plugin)
rock_text_D (a stand alone rock text plugin)
metallic_D (a stand alone plugin that makes things metal)
long_shadow_pixel_data_D (stand alone extrusion plugin)
glossy_balloon_D (stand alone plugin that makes gloss coated bump text)
glass_metal_marble_D (stand alone plugin that makes glass metal marble text)
edge_smooth_D (stand alone plugin that smoothes edges)
custom_bevel_D (stand alone plugin that makes a variety of bevels and bumps)
clay_D (stand alone plugin that makes a clay bevel effect)
chrome_text_D (stand alone plugin that makes metal text)