# Custom Effect Set

It is now possible to configure the list of Effects required by the application. A new project will be created in this regard, which will include the generated EffectSet and the necessary dependent source files.

## CMake Flag

A new flag has been introduced to specify that a custom Effect Set shall be used: **CGIAPP_ENABLE_CUSTOM_EFFECT_SET**. This feature is disabled by default.

## CMakeLists Template File

A CMakeLists.txt template file can be used as reference on how to configure the custom effect set and integrate it in the application. This is located in *cgi_studio_candera/templates/EffectLists.template.txt*

- CGIEFFECTS_LIST - refers to a list of Candera Effects that should be added to the generated EffectSet
- CGIEFFECTS_PROJECTNAME - specifies the project name

## Integrate Custom Effect Set into application

- Create a new folder in the application source directory (eg: Effects) and add a *CMakeLists.txt* file inside, based on the template file mentioned above.
- Populate the list of needed effects and specify the project name.
- In the CMake configuration file of the application add the following line: CgiAddProject(Effects).
- Configure and build the application as usual.

## Example CMakeLists file

> Do not include the "Candera" namespace, this will be automatically added when the EffectSet will be generated.

```
# Effect List
set(PRV_CGIAPP_EFFECT_LIBRARY_LIST
    GlRadialGradientBrushBlend
    BitmapBrushBlend
    BitmapBrushColorBlend
    ShadowBitmapBrushBlend
)

set(PRV_CGIAPP_EFFECTSET_SUBDIRS
    .
)

CgiGetCurrentDir(PRV_CUR_DIR)

# Enable Custom EffectSet flag
set(CGIAPP_ENABLE_CUSTOM_EFFECT_SET TRUE CACHE BOOL "Enable Custom Effect Set")

# Include EffectSet Generator
set(CGISTUDIO_EFFECTSET_CMAKE_INCLUDE "${FeatStd_DIR}/cmake/cgistudio/cgistudio_effectset_gene
if(EXISTS ${CGISTUDIO_EFFECTSET_CMAKE_INCLUDE})
    include(${CGISTUDIO_EFFECTSET_CMAKE_INCLUDE})
    # Create Custom EffectSet
    if(CGIAPP_ENABLE_CUSTOM_EFFECT_SET)
        CgiCreateEffectSet("EffectSet" "${PRV_CGIAPP_EFFECT_LIBRARY_LIST}")
    endif(CGIAPP_ENABLE_CUSTOM_EFFECT_SET)
else()
    message(FATAL_ERROR "EffectSet Generator '${FeatStd_DIR}/cmake/cgistudio/cgistudio_effects
endif()
```

> Is is not possible to generate an empty EffectSet. An appropriate error message will be shown during project configuration and further processing will be halted.

> The user takes responsibility of assuring that all effects which are needed by the used CGI Studio products are included. (eg.: Candera::BitmapBrushColorBlend is required by Candera::TextNode2D).

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