

# iGP11

Application alters rendering pipeline of the games based on loaded plugin. This includes textures modifications (dumping, overriding and specifying level of details) and custom effects application based on color and depth information. Full support/compatibility in chosen games is ensured by the already implemented profiles. Not yet supported games might be handled by generic plugin, though some things might not work properly.

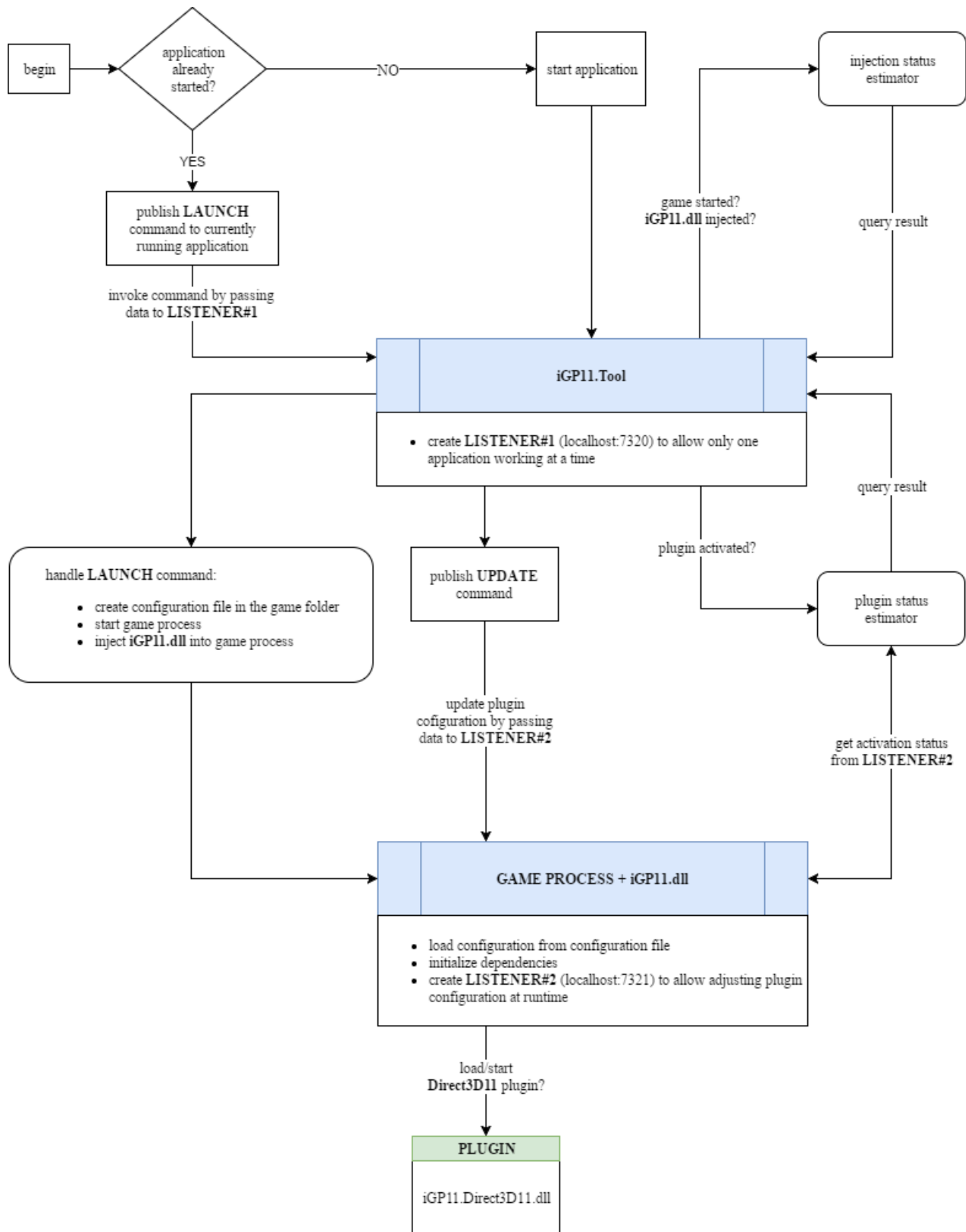
## Requirements:

- *Windows 7 64bit or newer*

## Installation:

- Application can be installed with *setup.exe*.
- In case of failure, try to install prerequisites manually and then run *iGP11.Installer.msi*:
  - *Microsoft .NET Framework 4.6.1 (by default included in Windows 10)*:  
<https://www.microsoft.com/en-us/download/details.aspx?id=49981>
  - *Visual C++ Redistributable*: <https://www.microsoft.com/en-us/download/details.aspx?id=48145>
  - Run *iGP11.Installer.msi* and follow setup steps
  - Launch/configure application via one of those files:
    - *iGP11.Tool.exe* – opens configuration
    - *iGP11.Launcher* – launches the game, if tool has already been configured
  - Specify location to your game executive file
  - Check other settings: copy textures to *tex\_override* folder etc. (clicking *arrow* button opens folder in *Windows Explorer*)
  - Launch your game by clicking *Launch* button or double clicking *iGP11.Launcher*

## Application Flow



## Texture modding

### 1. Dumping textures

- Select *Dumping mode* in configurator and launch your game by clicking *Launch* button or double clicking *iGP11.Launcher.exe*
- Start new game/load save and play – textures used by the game will be dumped to location specified in *dumping directory* in configuration.

### 2. Converting textures

Most dds editors won't be able to open and edit formats introduced in *DirectX10/DirectX11* (like *BC7*). In order to get around this issue click *Texture management* menu item.

This window allows you to convert textures to other formats (the best ones are those supported by *DirectX9*). Conversion must be done with caution. Especially, take closer look at textures saved in *Typeless* format – convert them to *UNORM* and adjust their color space (sRGB).

It is advised to convert textures to *BC3\_UNORM*, because uncompressed textures take a lot of space.

Under the hood, the application uses *DirectXTk* to load custom textures – it is important for you to know, that this library doesn't support *DirectX10/DirectX11* formats.

Documentation:

[https://msdn.microsoft.com/en-us/library/windows/desktop/bb173059\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/bb173059(v=vs.85).aspx)

[https://msdn.microsoft.com/en-us/library/windows/desktop/hh308955\(v=vs.85\).aspx](https://msdn.microsoft.com/en-us/library/windows/desktop/hh308955(v=vs.85).aspx) (look at minimum supported feature level)

### 3. What textures can be applied?

You can alter dumped textures in any way you want (change size, format etc.). Just remember to save textures in the format supported by *DirectX9*.

### 4. How to force *Srgb* color space for selected texture?

Add to *tex\_override* folder a .txt file named: *tex\_id.txt* with content set to: *force\_srgb=1* (example in *tex\_cache* folder, works only for textures, which were dumped as *Typeless*)

## Supported games

Currently only *Direct3D11* rendering library is supported. Supported games have effects applied before the game renders the UI:

- Dark Souls 2 Scholar of the first sin
- Dark Souls 3
- Fallout 4

## Known issues

Some applications acting as overlays might cause compatibility issues. One of those applications seems to be *FRAPS*, which for some reason prevents *IDXGISwapChain::Present* to be hooked and called. This can be recognized by having *plugin partially initialized, awaiting final initialization...* status not changing after quite some time. Solution seems to be quite simple: launch *FRAPS* after the game.

## Libraries used:

- Autofac: <https://autofac.org/>
- Automapper: <http://automapper.org/>
- Log4net: <http://logging.apache.org/log4net/>
- DirectXTex: <https://github.com/Microsoft/DirectXTex>
- DirectXTk: <https://github.com/Microsoft/DirectXTK>
- MinHook: <https://github.com/TsudaKageyu/minhook>