G CODE MANAGER

Piotr „PiDi” Demski

p.demski@veritech.pl

TABLE OF CONTENTS

GCM Basics

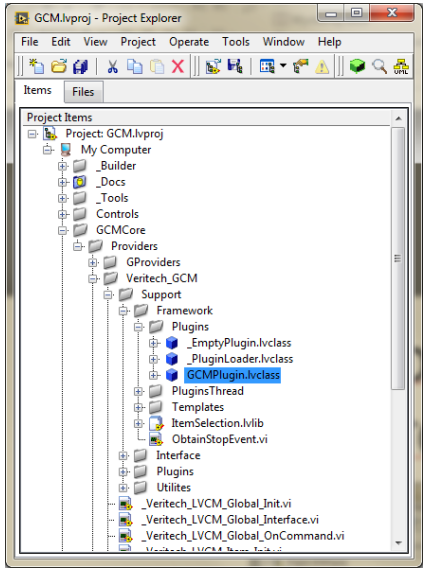
Quick Start

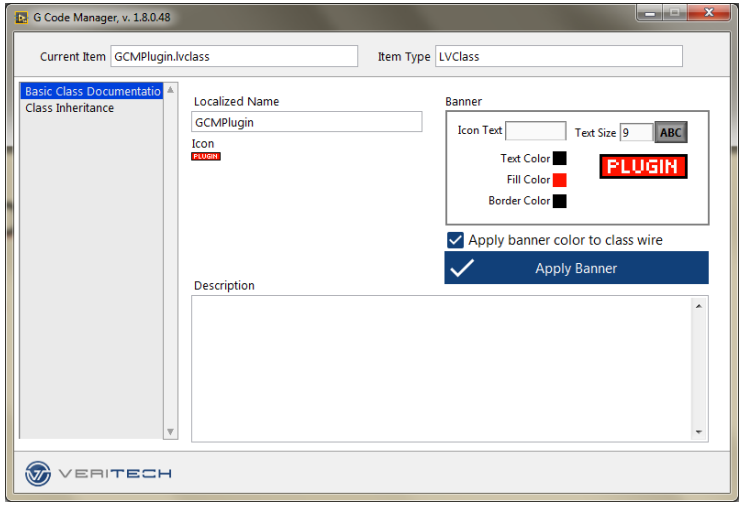
Where to report bugs

GCM BASICS

IDEA

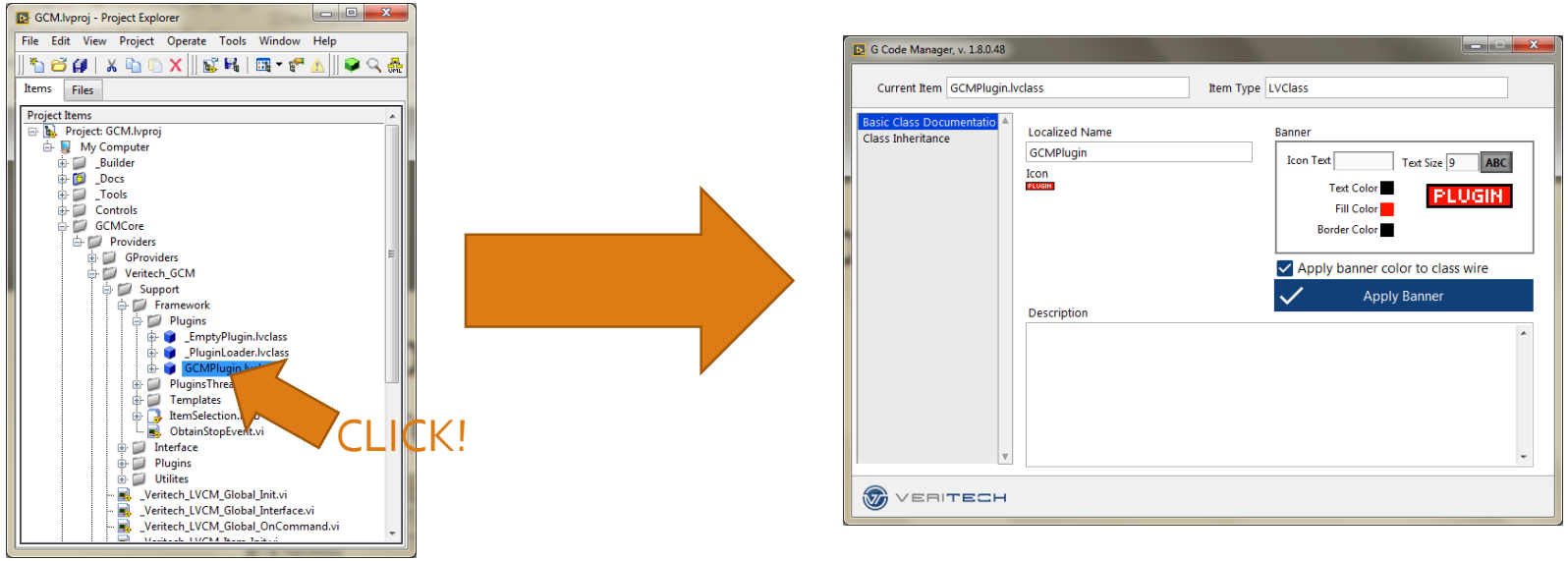
To make common operations with LV Project Items more accessible





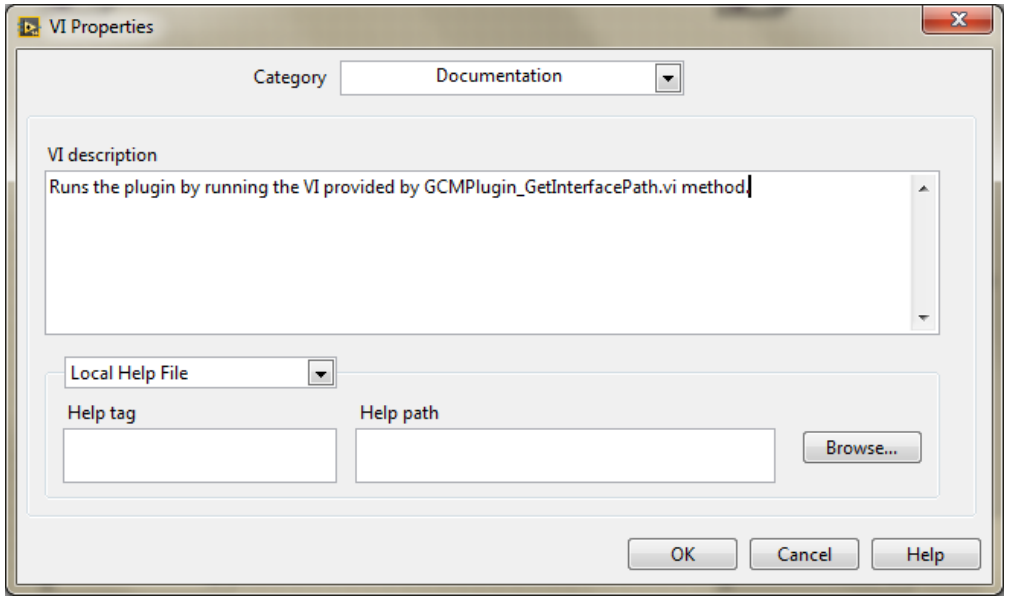
HOW

- Immediate access to any properties, like icon, documentation, inheritance tree...
- Non-blocking windows
- Using Project Providers framework



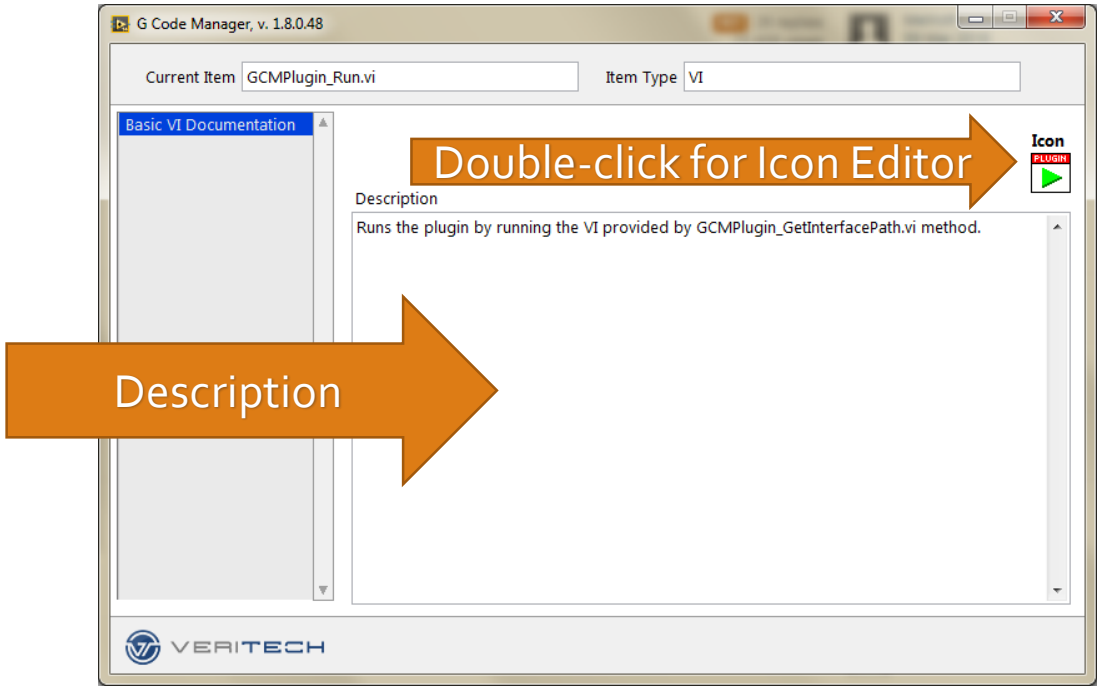
WHAT

- Basic VI documentation
- The VI properties window is modal…



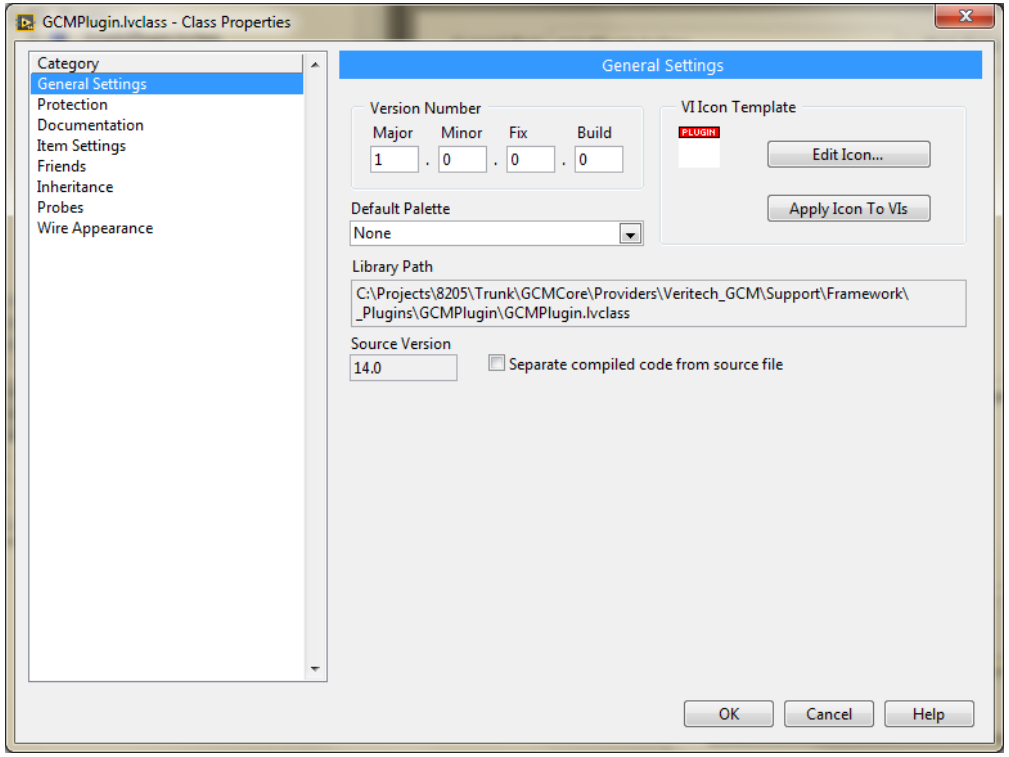
WHAT

- Basic VI documentation plugin
- Available for VIs/controls
- Non-modal window!



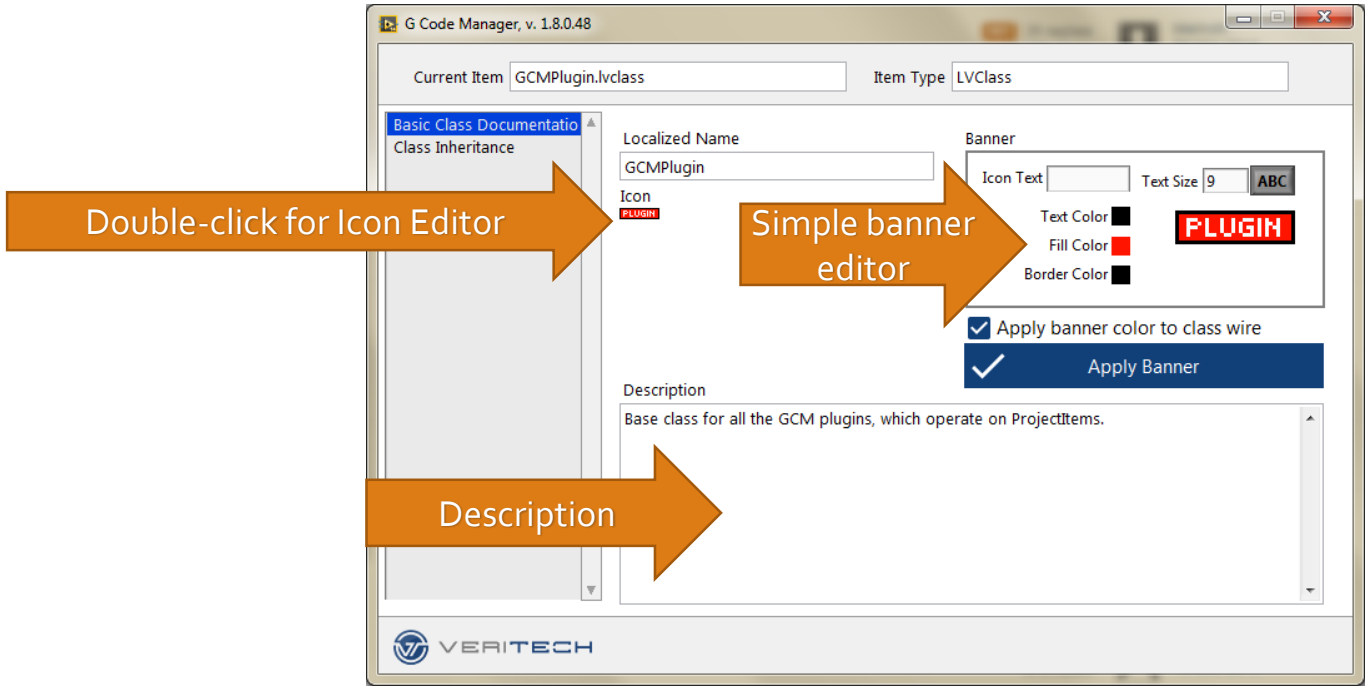
WHAT

- Basic class documentation
- The class properties window is modal
- And it can take ages to load



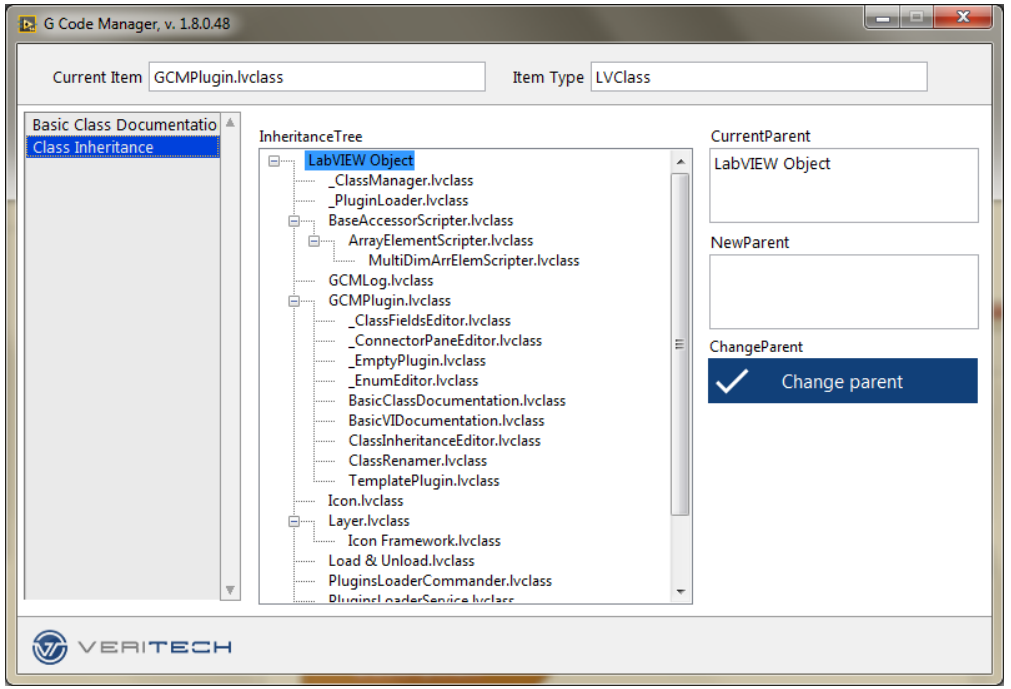
WHAT

- Basic Class Documentation plugin
- Available for classes
- Non-modal window!
- No loading time!



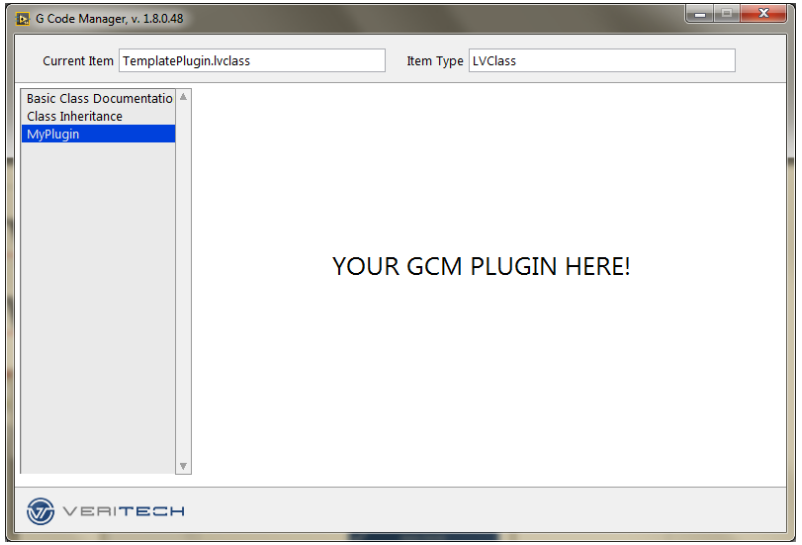
WHAT

- Class Inheritance plugin
- Available for classes
- Non-modal window!
- **No loading time!**



THE GOAL

To give everyone an easy way to customize their working environment



THE FUTURE

- Stabilizing the core
  - This tool was made using some internal LV APIs which are not fully tested and documented
  - It is in very early stage when it comes to stability
  - **It may cause LV to crash!**
  - I strongly advise using source control – if you're not using one, do not even install this tool!
- Extending basic functionality
  - Mirroring most important items from VIs/Classes property windows
- Giving everyone the opportunity to add their plugins
  - Creating one-click tool to create the new plugin
  - Keeping the plugin API as simple as it is now

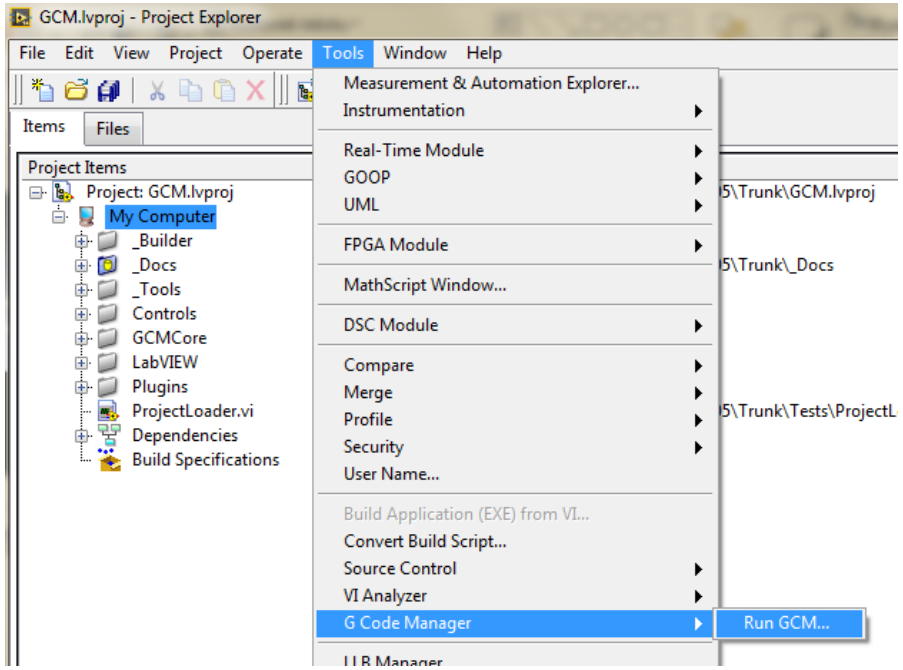
QUICK START

IMPORTANT NOTICE

- This tool was made using some internal LV APIs which are not fully tested and documented
- It is in very early stage when it comes to stability
- **It may cause LV to crash!**
- I strongly advise using source control – if you're not using one, do not even install this tool!

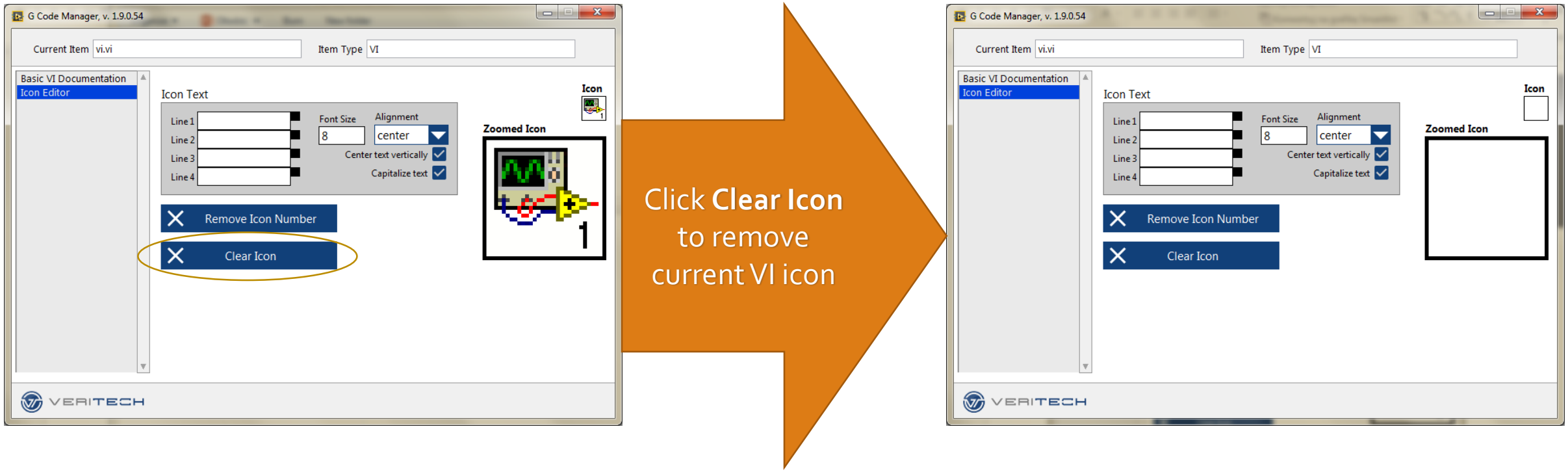
OPENING GCM

- In the Project Explorer window click on the **Tools** menu, then select **G Code Manager -> Run GCM…**

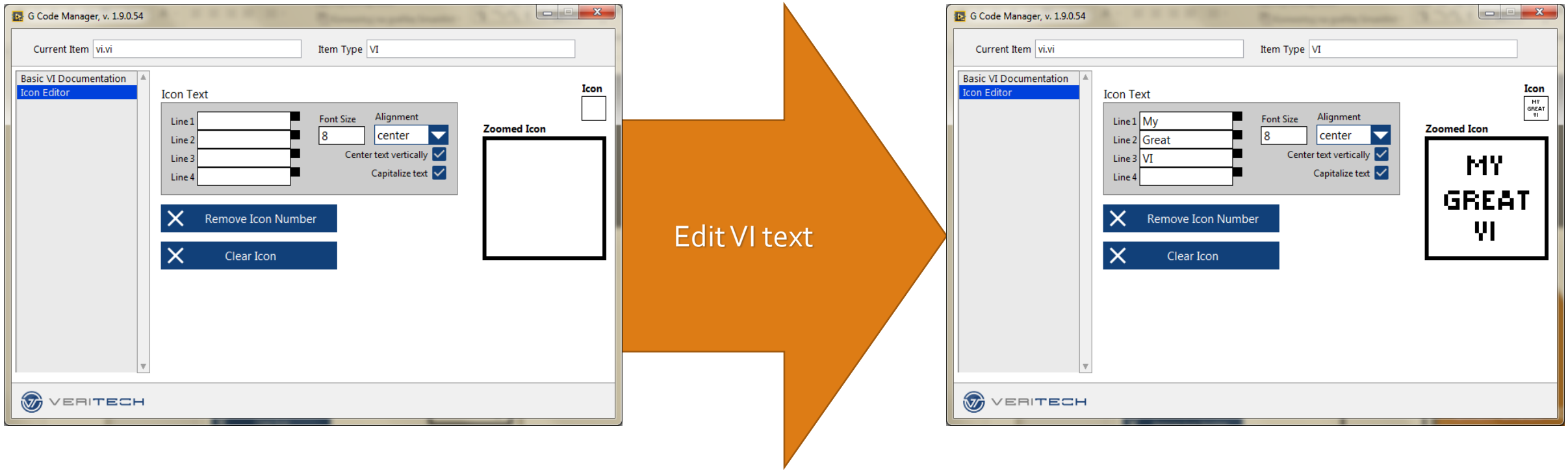


PLUGINS

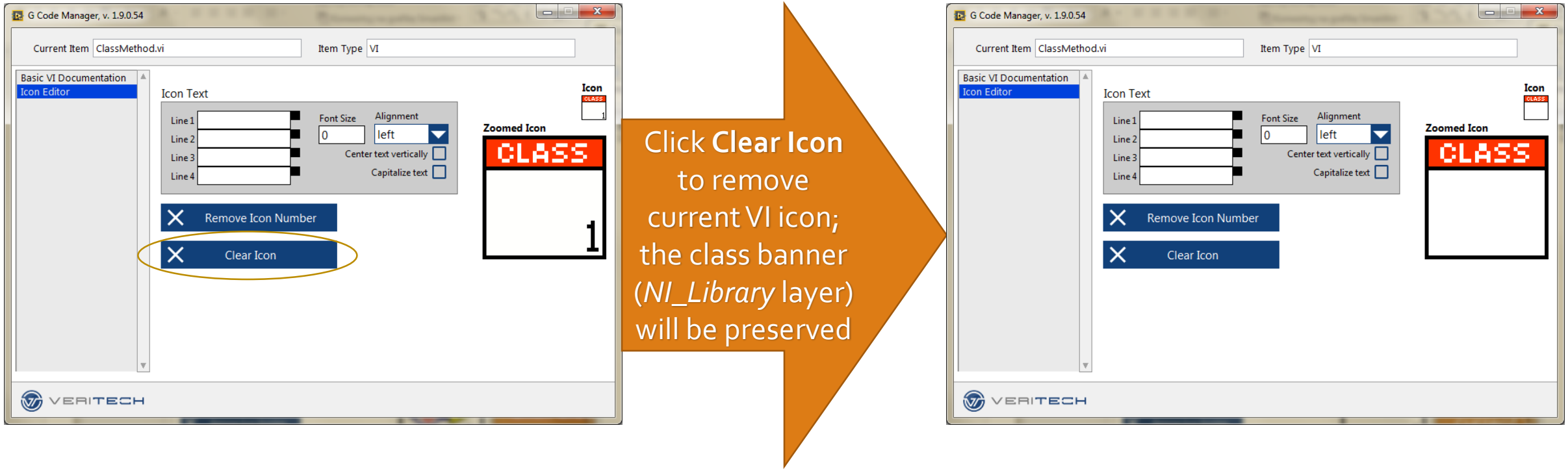
ICON EDITOR – VI



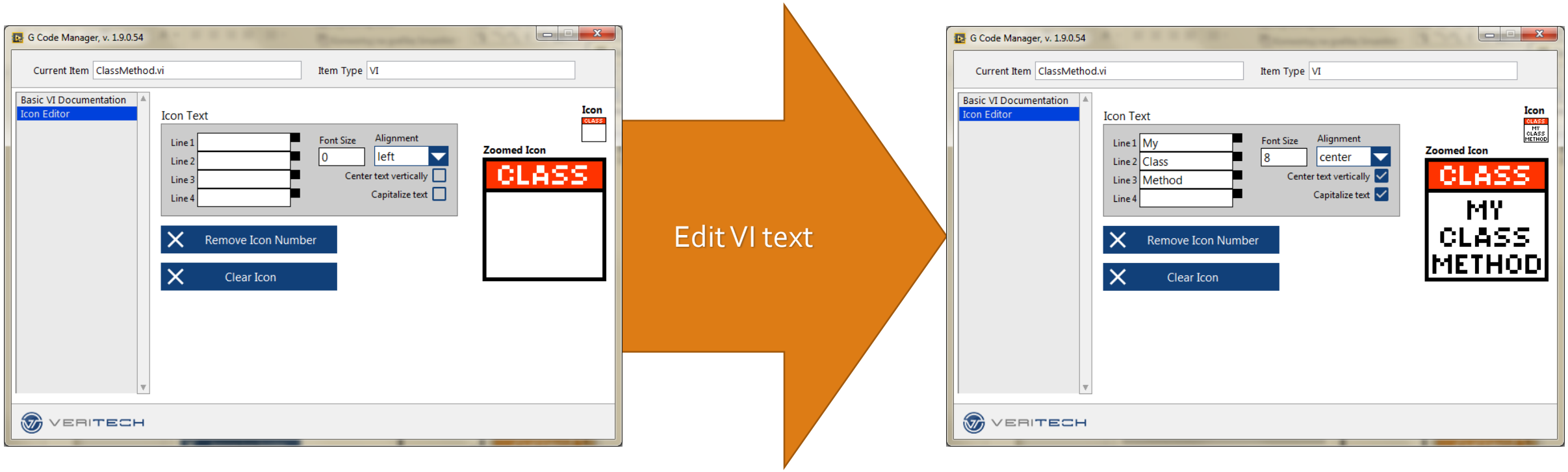
ICON EDITOR – VI



ICON EDITOR – CLASS MEMBER VI



ICON EDITOR – CLASS MEMBER VI



CREATING PLUGINS

YOUR OWN PLUGIN

- Create your own plugin: copy the template
  - From:

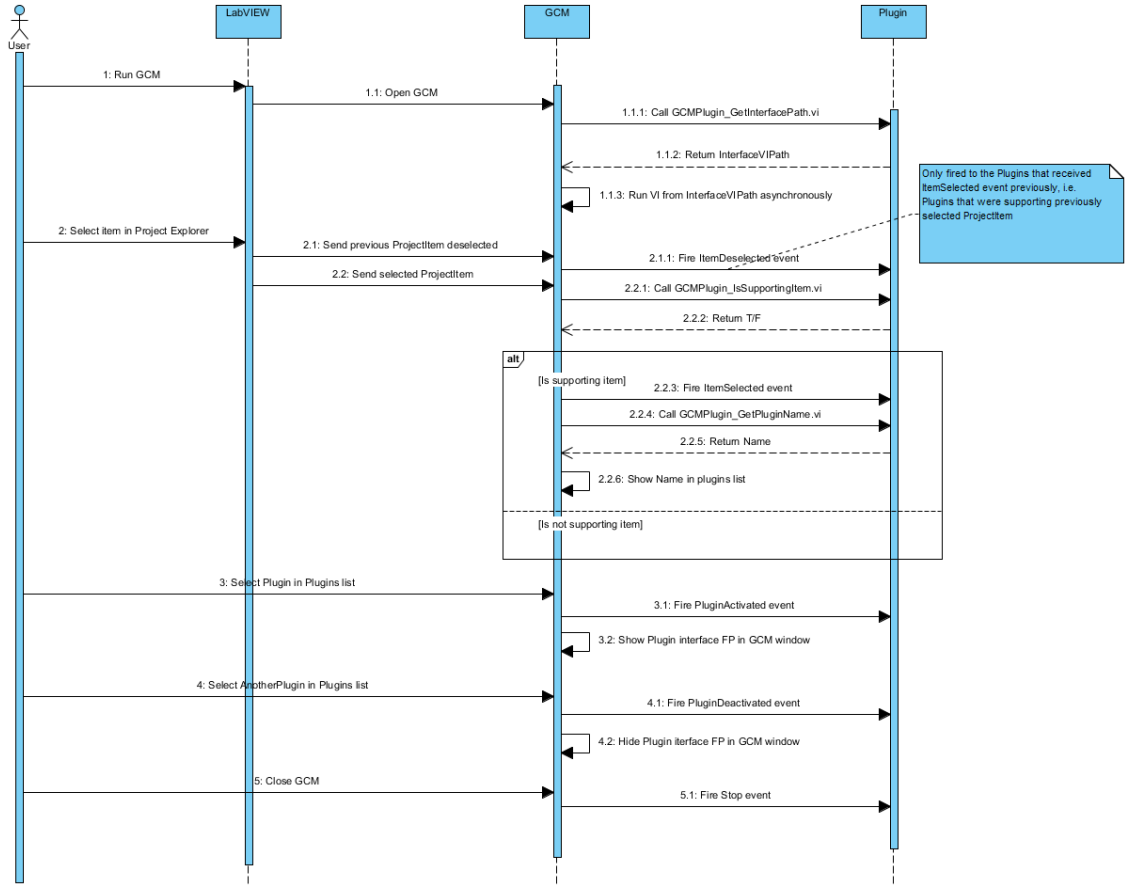
  <LV>\resource\Framework\Providers\Veritech_GCM\Support\Templates\TemplatePlugin
  - To:

  <LV>\resource\Framework\Providers\Veritech_GCM\Support\Plugins
  - Tip: do this from project window to preserve the dependecy to GCMPlugin class (create new project, add TemplatePlugin, then copy it using right-click menu)
- Edit the plugin VIs, do whatever you want with your Project Items!
  - Interesting points are marked in bookmark manager with #GCMTemplatePlugin

YOUR OWN PLUGIN

1. Edit **GCMPlugin_GetPluginName.vi**, so it returns proper name for your plugin.
2. Edit **GCMPlugin_IsSupportingItem.vi**, so it return True if the item is supported by your plugin
   - e.g. If your plugin supports editing VI description, you should check if VI Reference provided to IsSupportingItem.vi is valid.
3. Edit **GCMPlugin_GetInterfacePath.vi**, so it returns the path to your plugin interface VI. GCM will show this VIs Front Panel when the plugin is selected by User.
4. Edit your Interface VI:
   - Check the #GCMTemplatePlugin tags
   - Refer to GCM Plugin Workflow to see when the events are fired.

GCM PLUGIN WORKFLOW



WHERE TO REPORT BUGS

WHERE TO REPORT BUGS

- If you have any problems with this tool, please report it in the lavag topic: https://lavag.org/topic/19548-g-code-manager/
- You can also contact me directly at p.demski@veritech.pl

THANK YOU

Piotr „PiDi” Demski

p.demski@veritech.pl