**Flexlogger gRPC Client Creation Guide**

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# **Version History**

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| --- | --- | --- |
| **Author** | **Date** | **Version** |
| Naveen Kumar | 02/18/2023 | 1.0 |

# Proto File

1. Get Proto Files from [GitHub](https://github.com/ni/niflexlogger-automation-python).

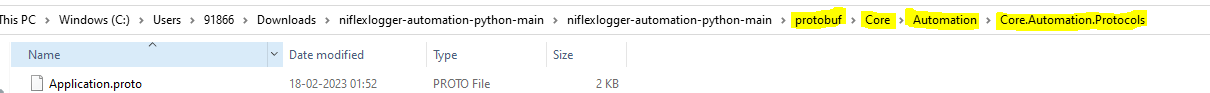
Graphical user interface, text, application, email

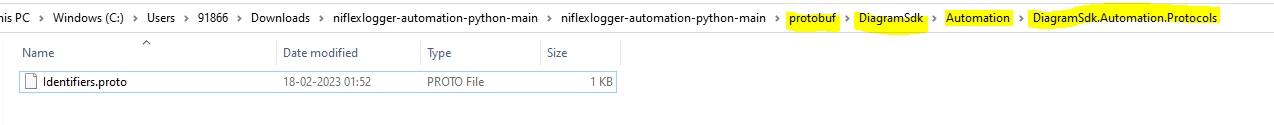
Description automatically generated

1. Merge all Proto Files into one single file.

Graphical user interface

Description automatically generated





1. Copy files one by one and check the errors with BloomRPC. And Fix the error.

* For example, Copy TestSession proto to a new file. And Try to open a new file in Bloom RPC.

Graphical user interface, application

Description automatically generated

* It says **TestSessionState** is not found because it referenced from some other file.
  + To fix it, copy content from the respective file to the current file. (check all called places and reference them directly)

Graphical user interface, text, application, email

Description automatically generated

* + Repeat this process to all files and fix them. Use Bloom RPC Application to test the APIs.

1. For Bloom RPC, use 127.0.0.1 as an IP address. And Get port ID from “C:\ProgramData\National Instruments\FlexLogger\LastAutomationPort.txt.”

**Note:** Port file created only when flex logger is running and enable remote automation in flex logger -> **File -> Preference -> Enable Flexlogger to receive remote automation commands.**

Graphical user interface, text, application

Description automatically generated

# Auto Generation Tool

1. Download VIPC packages from [GitHub](https://github.com/ni/grpc-labview/tags). And Install them.

Graphical user interface, text, application

Description automatically generated

1. It adds an autogeneration tool to the following location.

Graphical user interface, text, application

Description automatically generated

1. Make the Following changes to the proto file. (Give a dummy name for the package, e.g., “flex logger”)

Graphical user interface, text, application, email

Description automatically generated

1. Motifiy “C:\Program Files\National Instruments\LabVIEW 2020\vi.lib\gRPC\gRPC Server and Client Template [2]\gRPC Scripting Tools\Top Level API\**Update RPC Client Method Constants. vi**” as Shown below.
   * Search **flexlogger** and replace “**national\_instruments.flex\_logger.automation.protocols**” on Method Name Case

Graphical user interface, diagram

Description automatically generated

OR

1. Copy VI “C:\Projects\labview\_pyflexlogger\FlexLoggerAPI\grpcAPI\Proto\Automation Tool VIs\Update RPC Client Method Constants.vi” 🡪 “C:\Program Files\National Instruments\LabVIEW 2020\vi.lib\gRPC\gRPC Server and Client Template [2]\gRPC Scripting Tools\Top Level API\**Update RPC Client Method Constants.vi**”
2. Configure Inputs in the Auto generation tool as shown below.

A picture containing chart

Description automatically generated

1. As shown below, it will create a “Flexlogger-Client” Library to configure the project.

Text

Description automatically generated