# 1 Flutter

## 1.1 flutter protoc\_plugin/install

### 在线文档

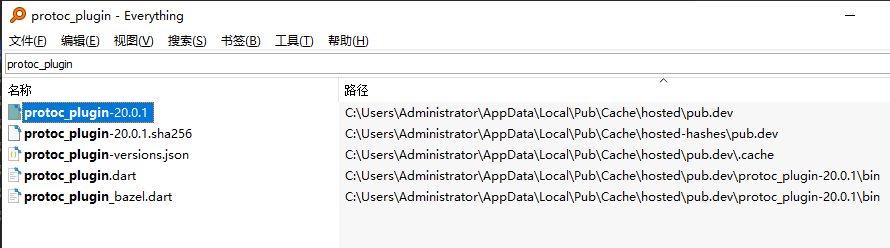
<https://grpc.io/docs/languages/dart/quickstart/>

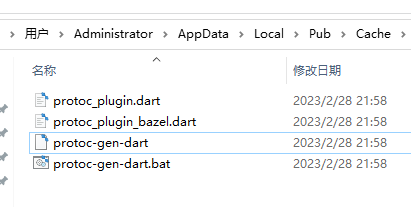
<https://pub.dev/packages/protoc_plugin>

<https://pub.dev/packages/protoc_plugin/install>

pubspec.yaml

protoc\_plugin: ^20.0.1





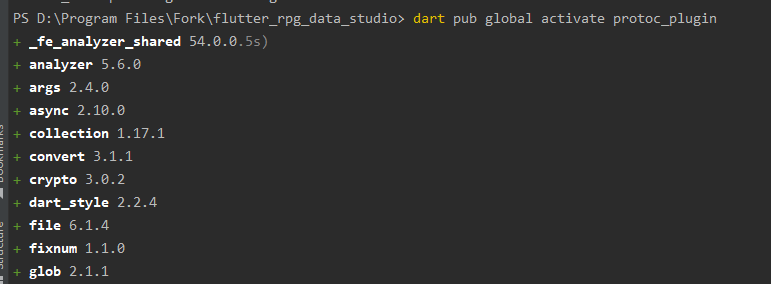
### protoc --version 显示版本号则编译器安装成功

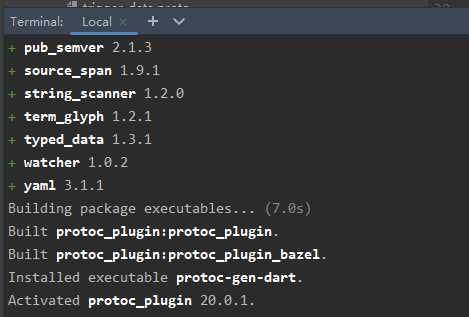
打开 cmd 执行



## 1.2运行激活命令

> dart pub global activate protoc\_plugin





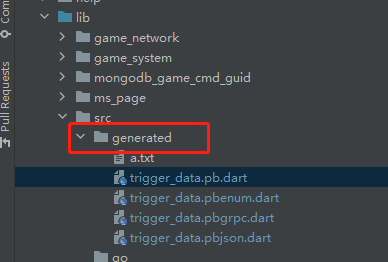
## 1.3 运行命令生成dart代码文件

Android Studio

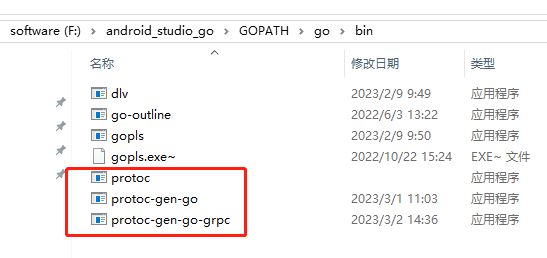
|  |
| --- |
| > protoc --dart\_out=grpc:lib/src/generated -Iprotos protos/trigger\_data.proto |



成功生成的文件如下图：



# 2 Go Install Protocol Buffers plugin



## 2.1 protoc-gen-go-grpc

GOPROXY=https://goproxy.cn,direct

PS E:\data\flutter\_rpg\_data\_studio\game\_quantum\_service\proto> go install google.golang.org/grpc/cmd/protoc-gen-go-grpc@latest

go: downloading google.golang.org/grpc/cmd/protoc-gen-go-grpc v1.3.0

go: downloading google.golang.org/grpc v1.53.0

go: downloading google.golang.org/protobuf v1.28.1

PS E:\data\flutter\_rpg\_data\_studio\game\_quantum\_service\proto>

## 2.2 安装protoc 编译器protoc-22.0-win64.zip

<https://github.com/protocolbuffers/protobuf/releases/tag/v22.0>

protoc-22.0-win64

是个protoc.exe

配置环境变量：

系统变量 path add

D:\android\_studio\_go\protoc-22.0-win64\bin

## 2.3 protoc-gen-go

# 3 定义协议

## Go

syntax = "proto3";

package GameData;

// go\_package 使用 go mod 需要的路径即可，也可以是私有 gitlab package

option go\_package = "./grpc\_go";

// The greeting service definition.

service Greeter {

  // Sends a greeting

  rpc SayHello (HelloRequest) returns (HelloReply) {}

}

import (

\_ "github.com/grpc/grpc-go/encoding/gzip"

)

<https://protobuf.dev/getting-started/darttutorial/>

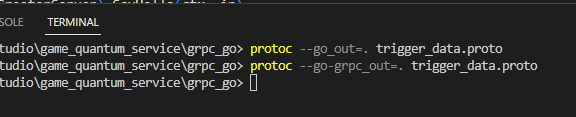
# 4 开发过程中执行命令

## Golang VS Code TERMINAL

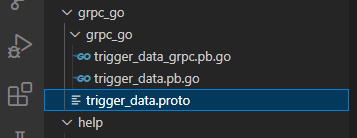
RUN CMD:

protoc --go-grpc\_out=. trigger\_data.proto

protoc --go\_out=. trigger\_data.proto



生成文件如下图:

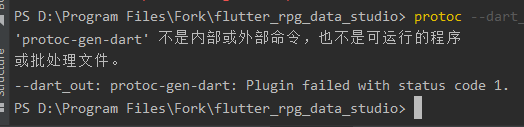


# Error list

## 'protoc-gen-dart' 不是内部或外部命令，也不是可运行的程序

'protoc-gen-dart' 不是内部或外部命令，也不是可运行的程序 或批处理文件。

> protoc --dart\_out=grpc:lib/src/generated -Iprotos protos/trigger\_data.proto



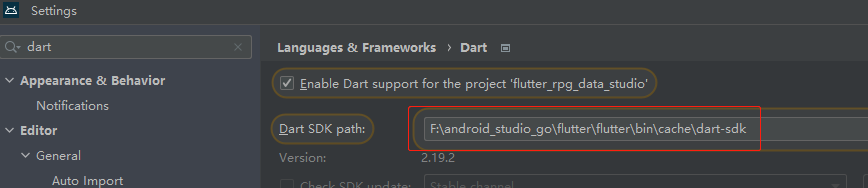
解决：

这是因为没有安装 protoc dart插件所致。

按照官方插件的安装指引，在命令行中运行：

PS E:\data\flutter\_rpg\_data\_studio> dart pub global activate protoc\_plugin

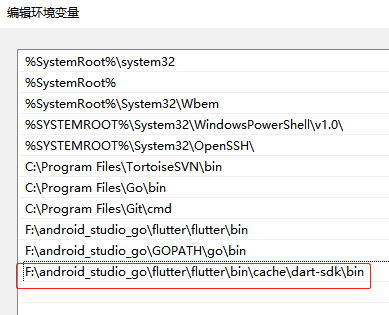
pub 是dart 的命令。如果你安装了dart 却没有办法使用pub 命令，那说明你没有添加dart环境变量。 如下图所示添加一下。



F:\android\_studio\_go\flutter\flutter\bin\cache\dart-sdk

系统变量-path

F:\android\_studio\_go\flutter\flutter\bin\cache\dart-sdk\bin

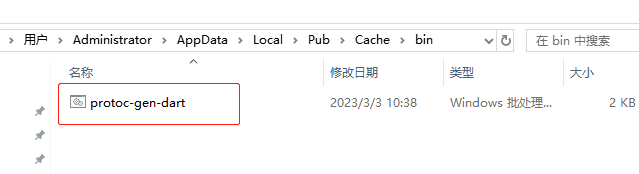


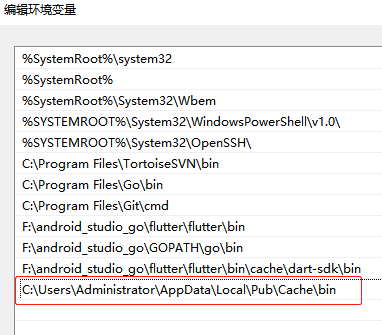
### 继续激活

|  |
| --- |
| Windows PowerShell  版权所有 (C) Microsoft Corporation。保留所有权利。  PS E:\data\flutter\_rpg\_data\_studio> dart pub global activate protoc\_plugin  Package protoc\_plugin is currently active at version 20.0.1.  > dart\_style 2.2.5 (was 2.2.4)0s)  Building package executables... (8.7s)  Built protoc\_plugin:protoc\_plugin.  Built protoc\_plugin:protoc\_plugin\_bazel.  Installed executable protoc-gen-dart.  Warning: Pub installs executables into C:\Users\Administrator\AppData\Local\Pub\Cache\bin, which is not on your path.  You can fix that by adding that directory to your system's "Path" environment variable.  A web search for "configure windows path" will show you how.  Activated protoc\_plugin 20.0.1.  PS E:\data\flutter\_rpg\_data\_studio> |

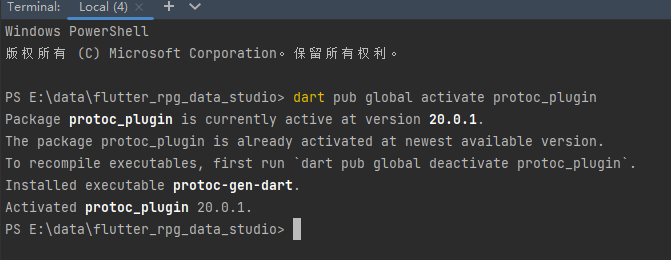
### 修复环境变量path

C:\Users\Administrator\AppData\Local\Pub\Cache\bin





### 激活success



<https://github.com/google/protobuf.dart>

<https://github.com/google/protobuf.dart/tree/master/protoc_plugin>

## flutter: Caught error: gRPC Error

Building Windows application...

Debug service listening on ws://127.0.0.1:51216/XyjmHVW64B0=/ws

Syncing files to device Windows...

flutter: Caught error: gRPC Error (code: 12, codeName: UNIMPLEMENTED, message: grpc: Decompressor is not installed for grpc-encoding "gzip", details: [], rawResponse: null, trailers: {})

删除客户端 gzip code, Go服务器端没有使用gzip

## gRPC Error (code: 14, codeName: UNAVAILABLE,

Launching lib\main.dart on Windows in debug mode...

Building Windows application...

Debug service listening on ws://127.0.0.1:52016/\_5MW56M9wQs=/ws

Syncing files to device Windows...

flutter: Caught error: gRPC Error (code: 14, codeName: UNAVAILABLE, message: Error connecting: HandshakeException: Handshake error in client (OS Error:

WRONG\_VERSION\_NUMBER(../../third\_party/boringssl/src/ssl/tls\_record.cc:242)), details: null, rawResponse: null, trailers: {})

### 解决：

需要下面代码

options: ChannelOptions(  
 credentials: ChannelCredentials.insecure(),  
),

不安全选项，开发阶段时可以不需要HTTPS 证书

# Go version and Flutter

## Go grpc

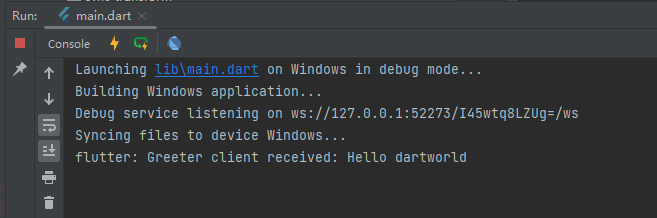
go: downloading google.golang.org/grpc v1.53.0

## Flutter grpc

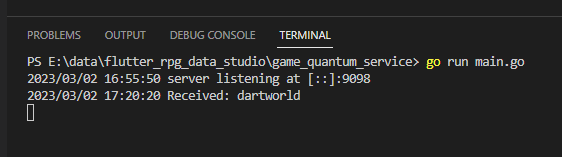
grpc: ^3.1.0

# Run Success Info

Flutter:



Go:



# Other

## Working With gRPC in Flutter on Top of a Go Service

<https://www.youtube.com/watch?v=Vd9sV8_uDrQ>

<https://developer.android.com/studio/preview>

Windows path

C:\Users\Administrator\AppData\Local\Pub\Cache\hosted\pub.dev\protoc\_plugin-20.0.1\bin