Creating gRPC Servers with C#

Michael Van Sickle

@vansimke

Introduction

Generating Source Code

Creating a Secure Connection

Receiving Metadata

RPC Calls
- Unary
- Server Streaming
- Client Streaming
- Bidirectional Streaming

Generating Source Code

```
# install gRPC tooling

nuget install Grpc.Tools
```

Generating Source Code

protoc

Generating Source Code

```
protoc

    -I .\pb
```

Generating Source Code

```
protoc

    -I .\pb

    --csharp_out .\Grpc\Messages .\pb\messages.proto
```

Generating Source Code

```
protoc

    -I .\pb

    --csharp_out .\Grpc\Messages .\pb\messages.proto

    --grpc_out .\Grpc\Messages
```

Generating Source Code

```
protoc

    -I .\pb

    --csharp_out .\Grpc\Messages .\pb\messages.proto

    --grpc_out .\Grpc\Messages

    --plugin=protoc-gen-grpc=.\pb\Grpc.Tools.1.0.1\tools\
        windows_x64\grpc_csharp_plugin.exe
```

Demo:
Generating Source Code

Demo:
Creating a Secure
Connection

Demo:
Receiving Metadata

Demo:
RPC Calls (4 clips)

Summary

Generating Source Code

Creating a Secure Connection

Receiving Metadata

RPC Calls
- Unary
- Server Streaming
- Client Streaming
- Bidirectional Streaming