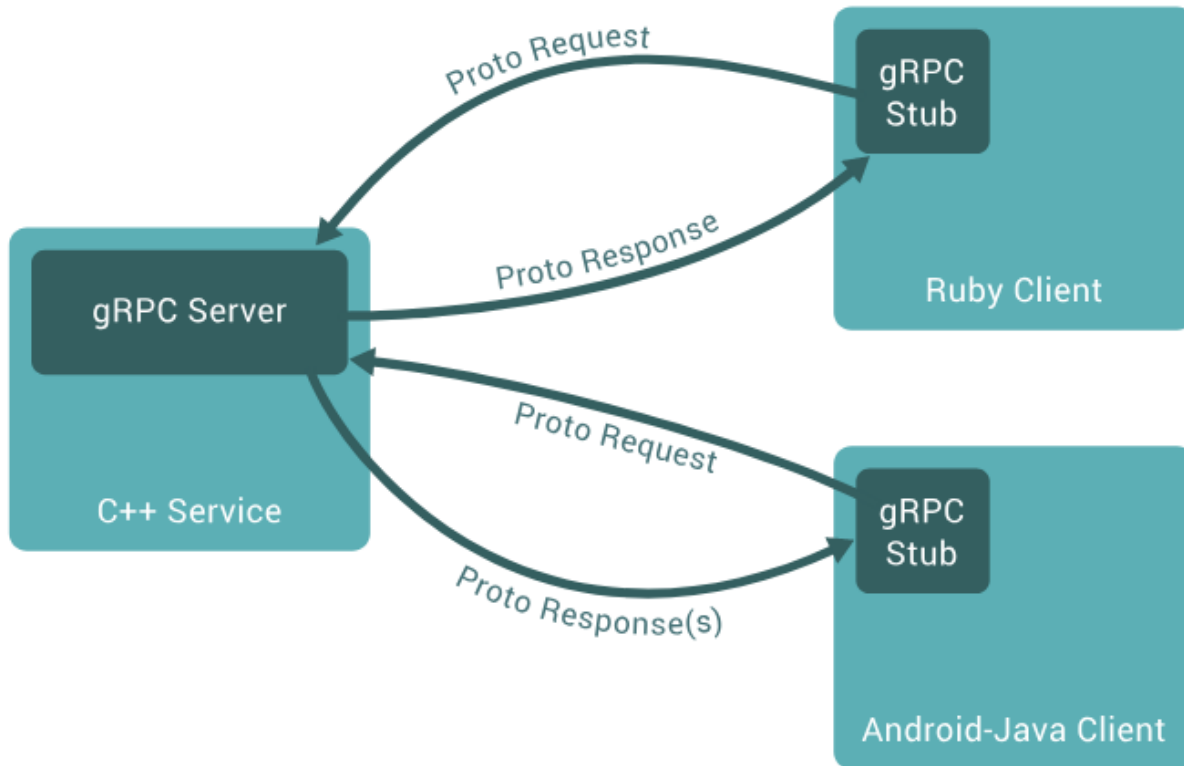# gRPC

gRPC (gRPC Remote Procedure Calls) is an open source remote procedure call (RPC) system initially developed at Google. The first g seems like Google.

It uses HTTP/2 for transport, Protocol Buffers as the interface description language, and provides features such as authentication, bidirectional streaming and flow control, blocking or nonblocking bindings, and cancellation and timeouts. It generates cross-platform client and server bindings for many languages.

In gRPC a client application can directly call methods on a server application on a different machine as if it was a local object, making it easier for you to create distributed applications and services. As in many RPC systems, gRPC is based around the idea of defining a service, specifying the methods that can be called remotely with their parameters and return types. On the server side, the server implements this interface and runs a gRPC server to handle client calls. On the client side, the client has a stub (referred to as just a client in some languages) that provides the same methods as the server.

You can see the concept at https://grpc.io/docs/guides/concepts.html#service-definition