CODESYS STORE

RPC Example

The package contains an example project for “Remote Procedure Calls”. Two applications demonstrate the implementation of server and client RPC applications.

Product description

The example is based on the library RPC which is part of the CODESYS Development System. The library contains all required components for building RPC applications. The example project `RPCExample.project` shows the usage of this library on the basis of a simple client and server application.

More information

The project `RPCExample.project` includes the applications `RPClient` and `RPCServer`. Both applications must run on separate devices.

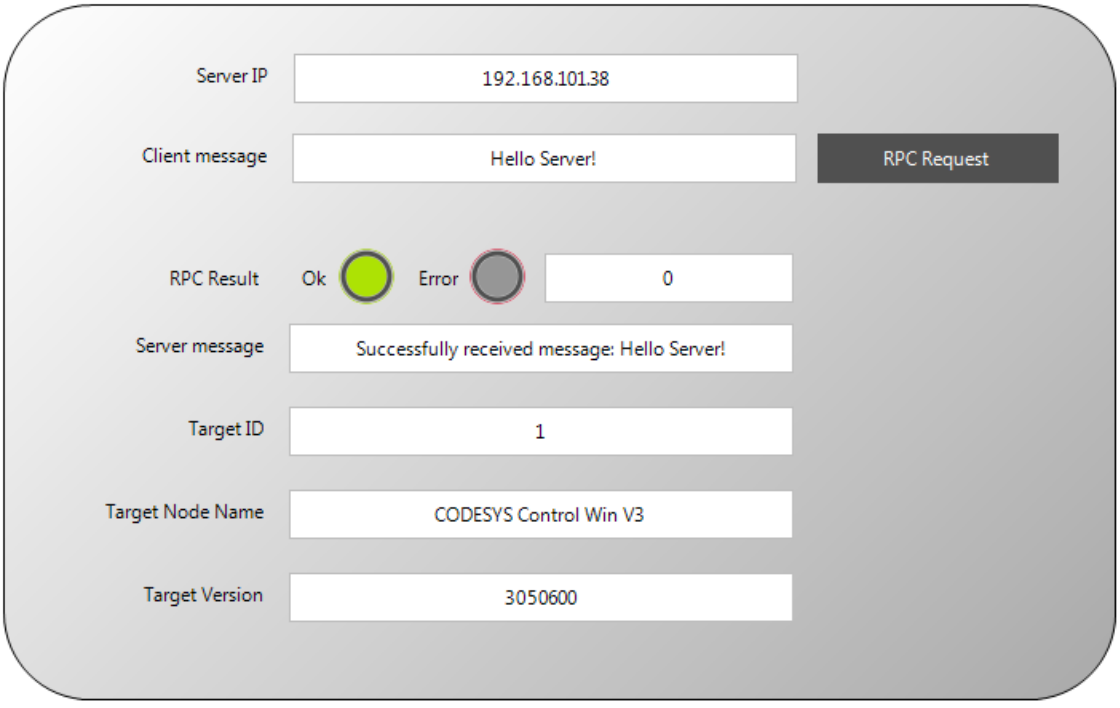
RPC Client

The program `PROG` executes four remote procedure calls on the server:

- HelloServerRequest
- GetTargetId
- GetTargetNodeName
- GetTargetVersion

Each call is handled by the function block `RPCRequest` which uses the function block `RPC.CLClient` to send an RPC request to the server. The results of the request are copied to the corresponding variables in the method `InvokeCallback` of the function block `RPCClientCallback`. The request status and the result of the request are displayed in visualization.

Visualization



At first, the IP address of the server must be entered in the field “Server IP”. After that the RPC request can be started via the button “RPC Request”.

RPC Server

The program `PLC_PRG` initializes the function block `RPC.CLServer` and registers the interface `IRPCProvider`. A

procedure is described by `objectId`, `interfaceId` and `operationnumber`. The request and the callback function are handled by `operationnumber` in the method `Request`. The callback function can also be executed asynchronously in the next cycle. The server component of the RPC library includes three standard procedures with device information by default (Target Name, Target ID, Target Version).

General information

Manufacturer:

3S-Smart Software Solutions GmbH
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Germany

Support:

https://support.codesys.com

Item:
RPC Example
Item number:
000059
Sales:

CODESYS Store
https://store.codesys.com

Included in delivery:
RPCExample.project

System requirements and restrictions

Programming System	CODESYS Development System V3.5.9.0
Runtime System	CODESYS Control V3.5.9.0
Supported Platforms/ Devices	All Note: Use the project “Device Reader” to find out the supported features of your device. “Device Reader” is available for free in the CODESYS Store.
Additional Requirements	Ethernet adapter
Restrictions	-
Licensing	-
Required Accessories	-

Note: Not all CODESYS features are available in all territories. For more information on geographic restrictions, please contact sales@codesys.com.
Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.