



# NVIDIA DOCA Comm Channel

## Sample Guide

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# Chapter 1. Introduction

DOCA Comm Channel is a secure, network independent communication channel between the host and the BlueField-2 DPU.

For more information about DOCA Comm Channel library, refer to [NVIDIA DOCA Comm Channel Programming Guide](#).

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# Chapter 2. Dependencies

The library requires a minimum DPU firmware version of 24.32.0458.

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# Chapter 3. Prerequisites

N/A

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# Chapter 4. Samples

## 4.1. CC Client

This sample illustrates how to create a simple client on the host to communicate with a server on the DPU.

The sample logic includes:

1. Initializing needed Comm Channel structures.
2. Creating Comm Channel endpoint.
3. Connecting current endpoint to server side.
4. Sending Hello message.
5. Receiving server response.
6. Closing connection and freeing resources.

Reference:

► `/opt/mellanox/doca/samples/doca_comm_channel/cc_client/cc_client.c`

## 4.2. CC Server

This sample illustrate how to create a simple server on the DPU to communicate with a client on the host.

The sample logic includes:

1. Initializing needed Comm Channel structures.
2. Creating Comm Channel endpoint.
3. Listening for new connections.
4. Waiting until new message arrives.
5. Sending Hello message as a response.
6. Closing connection and freeing resources.

Reference:

► `/opt/mellanox/doca/samples/doca_comm_channel/cc_server/cc_server.c`

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