Optris Thermal Camera SDK

Acquiring the OTC SDK

Download the latest Optris Thermal Camera SDK Linux package from the Optris website:
https://optris.com/software/apis-sdks/

> ⚠️ The downloaded Linux package must match the target operating system and system architecture.

Installing the OTC SDK on Linux

The OTC SDK is installed on Linux via the command line. Open a terminal and navigate to the directory containing the downloaded package. Install the package by running **sudo apt install**. The apt package manager automatically installs all missing software dependencies alongside the OTC SDK. The SDK is installed in the **/usr** directory.

Run the following commands in a terminal to install the OTC SDK:
Note: The name of the downloaded package might vary

```
cd ~/Downloads
sudo apt install ./otcsdk-10.0.0-amd64.deb
```

Copying the documentation and examples

On Linux, the documentation and the examples are installed in the directory **/usr/share/doc/otcsdk**. To work with these files comfortably, it is recommended to copy them in the user's home directory.

Run the following commands in a terminal to copy the documentation and the examples:

```
mkdir ~/optris_ws/otcsdk/doc -p
sudo cp /usr/share/doc/otcsdk/* ~/optris_ws/otcsdk/doc -r
sudo cp /usr/share/otcsdk/Quick\ Start\ Guide.pdf ~/optris_ws/otcsdk/doc/

sudo chown -R $USER ~/optris_ws/otcsdk/doc
```

Testing the OTC SDK installation

The SDK can be tested by running the Simple View example. Start the example by running the command **simpleView** in a terminal.

Run the following commands in a terminal to start the Simple View example:

```
cd ~/optris_ws/otcsdk/doc/examples/bin
./simpleView
```
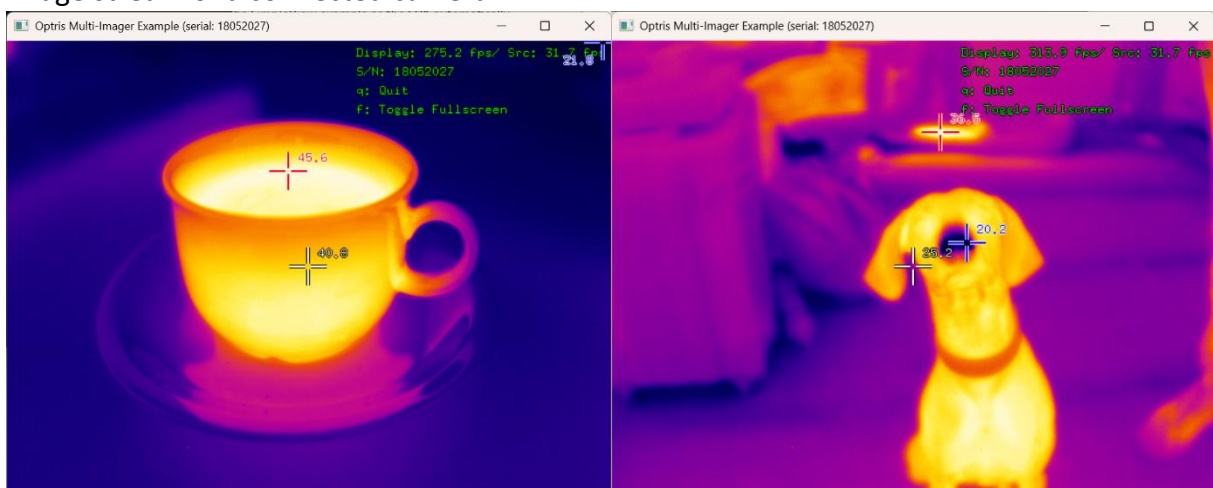
> ⚠️ An Optris thermal USB camera must be connected to the computer to run the Simple View example.

> ⚠️ Internet access is required to run the Simple View example. The SDK automatically downloads the calibration files of connected cameras.

If the SDK is installed correctly, the Simple View example should now display the false color image stream of a connected camera.

Tip: You can also use the shortcut created in your desktop menu to start Simple View.

Reading the docs

The SDK includes its documentation in html format. To view the documentation, open the file **~/optris_ws/otcsdk/doc/html/index.html** in a browser.

Tip: You can also use the shortcut in your desktop menu to access the documentation.

Starting to code with the OTC SDK

The OTC SDK comes with three example applications that show how to use the SDK in custom projects. The source code of these examples is available in C++, C# and Python and can be found in the **~/optris_ws/otcsdk/doc/otcsdk/examples** directory.

Examples of the SDK:

- **Enumeration Example**:
  List all connected Optris thermal cameras and show subsequent connection and disconnections events of Optris thermal cameras.

- **Minimal Example:**
  Connect to an Optris thermal camera and receive the camera frames. Accesses the measurement data but does not display images on screen.

- **Simple View Example:**
  Connect to an Optris thermal camera and receive the camera frames. Displays the false color video stream and shows the hot and cold spot in the current frame.

Uninstalling the OTC SDK

Run the following command in a terminal to uninstall the OTC SDK:

```
sudo apt remove otcsdk
```