

HOWTO

V4 - 2024-07-11

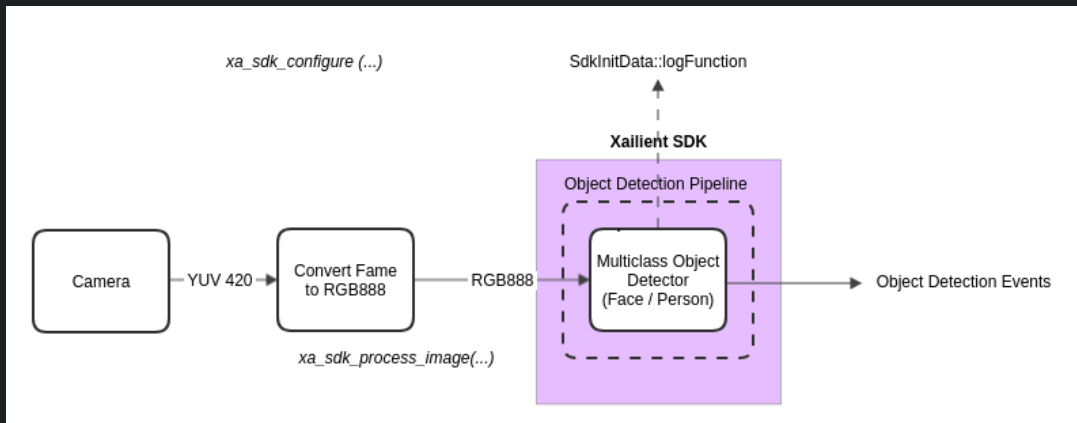
This document outlines how to integrate against the Xailient Object Detection SDK and libraries.

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Nomenclature

- Brand Customer - the organization desiring to integrate Xailient software into their product.
- Device Integrator - those responsible for providing backend services to the Device. This is generally not Xailient, and is often not the device manufacturer; this is often the Brand Customer or partner.
- Object Detection Event - events around an object detection
- Vision Cell - part of an SDK responsible for running inference on an image and generating events

SDK Context



SDK Integration

The Xailient Object Detection interface is comprised of two .a libraries and some header files.

They require g++ version 5.4.0

Order of Calls to SDK

1. `xa_sdk_initialize`
 - a. Pass in the `SdkInitData` as called out in the headers
2. `xa_sdk_configure`
 - a. Pass in the `Config` data as called out in the headers

3. `xa_sdk_process_image`

- a. Pass in the image (encoded as RGB888) and an instance of BizControllerOutput that the SDK will fill
- b. Inspect the results in the output

Code Examples

See `main.cpp` in the examples directory of the SDK package.

Other things to do

1. Optionally control the logging level by setting the `XAILIENT_LOG_LEVEL` environment variable to one of `ERROR`, `WARN`, `INFO`, `DEBUG`, or `TRACE`