Frequently Asked Questions

- The running environment of partial executable programs generated by the sample programs
    - Windows: Windows 7 and above, x64;
    - Linux: Ubuntu 16.04 and above, x86_64;
    - Android: Android 4.4 and above, armv7;
    - Unity: Windows 7 and above, x64; Android 4.3 and above, armv7.
- Build environment of sample programs
    - Windows: Visual Studio 2013. Open the .sln file in the sample program directory to build;
    - Linux: Qt Creator. Open .pro file in the sample program directory to build;
    - Android: Android Studio. Open the sample program directory to build;
    - Unity: Windows x86/x86_64 and Android platforms. Open the sample program directory to build.
- What features are provided by the sample program?
  Color image display, depth image display, skeleton image display, ground detection, point cloud image display, Unity stickman control, fake sensor etc.
- Supported cameras by SDK
  Topsens camera: No activation required.
  Third-party depth cameras: The trial version has a 5400 frames data limit, and the official version requires payment to activate.
- How to use Fake Sensor?
  Fake Sensor is a playback tool developed for Topsens own camera, and cannot be used for other cameras.
    - Windows and Linux: Run TopsensExplorer sample to generate recording file .tsr, and run FakeSensor.exe to playback the recording file;
    - Android: Generate the recording file in Windows or Linux because there is performance limitation in Android processor, copy the recording file to the storage of the Android system, and playback in program. It is recommended to use 320x240 resolution to generate the recording file, so that it can be played back smoothly on Android.
- About configurable action library
    - Standard action library: Topsens.rpk is standard action library and the default action library. It is released with the standard version of the SDK, and users do not need to call it specially;
    - Special action library: Fitness action library, medical rehabilitation action library, etc., users need to download the separately, put it together with the standard action library, and call it in the application to use the specific action library.
- Data source of the sample program
  Color and depth images are captured from the device as QVGA (320x240) or VGA (640x480) images.
- The number of identified joints
  17 joints are recognized in the current version, including all common joints in the human body. More can be provided if needed.

- Joints coordinate unit
  Meter.
- The number of identified
  6 users are identified in the current version. More can be provided if needed.
- About the X, Y, and Z axis
  The depth camera is the origin point. The X axis is positive right. The Y axis is positive up. The direction of the camera in the Z axis is positive.
- Can skeletons be set for smoothness and confidence?
  The recognized skeletons are accurate and non-jittering, so there is no need to set smoothness and confidence.
- User extraction
  The extracted user mask is provided by SDK. With simply overlaying the mask to color image, colorful user image can be acquired. Please refer to sample program for details.
- Ground detection
  Ground formula is currently provided to determine ground pixels. Please refer to sample program for details.
- Will the identified skeleton data be retained when the identified user disappears from the screen or is no longer tracked?
  When the user disappears, the skeleton data of the last frame will be kept for 2 seconds before disappearing. The time of 2 seconds can be adjusted if needed.