

1.Files

- (1).Dist -----The directory of installation package(support python3).
- (2).Script ----- The directory of python test scripts
- (3).vcredist_x64.exe----- VS2019 runtime library, If the msvcr140.dll is lost, double-click to install it

2. Python runtime environment configuration

(1).Install Python3 64-bit, URL: Python (<http://python.org/download/>)

(2).Install the test Nokov module

1) Go to the Dist directory and perform the following operations. The following uses Windows X64-bit as an example

a) Installing the packages

```
pip install nokovpy-3.0.1-py3-none-any.whl
```

2) Test module, go to Script directory

1) Run python Nokov_SDK_Client.py , Change the IP address of XINGYING to be connected as required, for example:

```
python Nokov_SDK_Client.py -s 10.1.1.198
```

2) Using the Python interpreter, type the relevant Python commands, as described in the function definitions and comments in nokovsdk.py under the Python package installation path, 例如 C:\Users\Administrator\pyenv\pyenv-win\versions\3.9.6\Lib\site-packages\nokov\nokovsdk.py, see also the Nokov_SDK_Client.py script.

2.Demo test

(1).Set the PC IP address to 10.1.1.198 and subnet mask to 255.255.255.0.

Disable the firewall and network blocking software.

(2).Run XINGYING motion capture software as an administrator.

(3).Select the data broadcast interface, select "NIC Address" , and then check "Setting" , "SDK Enabled" .XINGYING sends motion capture data, the local and other computers can receive data.

(4).In live mode, click run;Or, in post-process mode, play back data.

(5).After configuring the Python runtime environment according to the instructions, double-click the Nokovr_SDK_Client. py script to receive SDK data.

Note: In post-process mode, you need to close the client receiver before switching.

3.Data instructions

(1). The coordinate system is right-handed.

(2). For the Marker defined in Markerset, due to software operation problems, Marker occlusion and other reasons, the X, Y and Z coordinate values will be filled with 9999999.000000 when points are lost or cannot be identified.

(3). For Skeleton Builder, Rx, Ry, Rz may exceed 360 degrees during the movement of the skeleton, e.g., for two rotations, the rotation Angle is 720 degrees.

(4). Euler Angle rotation order, see Markerset Properties =》 Rotation Order,the default rotation order is ZYX.

(5). Bone axis orientation,see Markerset Properties =》 Bone Axis,the default bone axis is positive in the Y direction.

(6). The six-degree-of-freedom information of the skeleton refers to the translation and rotation of the skeleton relative to the parent segment. When creating a Markerset, the skeleton defined by default is relative to the geodetic coordinate system.