0.4 Batch Script Setup

The NMP evaluation example uses .bat scripts to launch and configure applications. These scripts need to know where certain applications and files are, and require network information to connect. You are required to edit some files to configure the system to work with your network and devices. The required edits are detailed:

1. The directory downloaded from the github is named "**NMP-Evaluation-Method-main**". Place this directory into your C drive. This is where the .bat scripts expect to find files as default.
2. It is expected that the applications used (**MATLAB, Reaper, Jacktrip, JACK**) are installed to the default locations outlined in the Installation Guide (0.2). If this is not the case, several of the .bat scripts will need updated using the noted installation directories from the Installation Guide (0.2). These files can be found in "**NMP-Evaluation-Method-main\Batch Scripts**".
   a. **JACK:**
   Edit the path to **jack.exe** in line 6 of the files "**launch_A.bat**", "**launch_B.bat**" and "**launch_TB.bat**".
   Edit the path to **jack.exe** in line 1 of the files "**connections_A.bat**", "**connections_B.bat**" and "**connections_TB.bat**".
   b. **JACK Control**:
   Edit the path to qjackctl.exe in line 11 of the files "**launch_A.bat**", "**launch_B.bat**" and "**launch_TB.bat**".
   c. **Reaper**:
   Edit the path to reaper.exe in line 17 of the files "**launch_A.bat**" and "**launch_B.bat**".
   d. **MATLAB:**
   Edit the path to matlab.exe in line 22 of the files "**launch_A.bat**" and "**launch_B.bat**".
3. JACK needs to know the name of your soundcard in order to route audio between applications and the soundcard.
   a. Navigate to the directory "NMP-Evaluation-Method-main\Guides\" and run the file "**listDevices.bat**".
   b. You will see a CMD window with a list of audio devices. Find your soundcard and **note the name of the device**. For example my Focusrite 2i2 is named "**ASIO::Focusrite USB ASIO**" (see below figure).
   c. Navigate to the directory "NMP-Evaluation-Method-main\Batch Scripts\" and edit line 6 of files "**launch_A.bat**", "**launch_B.bat**", and "**launch_TB.bat**". Replace the text which reads ***AUDIO DEVICE NAME*** with the name of your device.
4. Jacktrip needs to know the I.P. addresses of the computers used at each endpoint in order to stream audio between endpoints.
   a. Navigate to the directory "NMP-Evaluation-Method-main\Guides\" and run the file "**ipAddress.bat**".
   b. You will see a CMD window with a list of IP information. **Take a note** of your IPv4 address for the computer at each endpoint.
   c. Navigate to the directory "NMP-Evaluation-Method-main\Batch Scripts\".
      i. Edit line 2 of the files "**jacktrip_endpointB.bat**", "**jacktrip_A_TB.bat**". Change the text which reads **xxx.xxx.xxx.xxx** to the noted IPv4 address for endpoint A.
      ii. Edit line 2 of the file "**jacktrip_B_TB.bat**". Change the text which reads **xxx.xxx.xxx.xxx** to the noted IPv4 address for endpoint B.

5. The MATLAB application also needs informed of IP addresses.
   a. At each endpoint navigate to the directory "NMP-Evaluation-Method-main\Matlab Application". Open the file "IPS.xlsx".
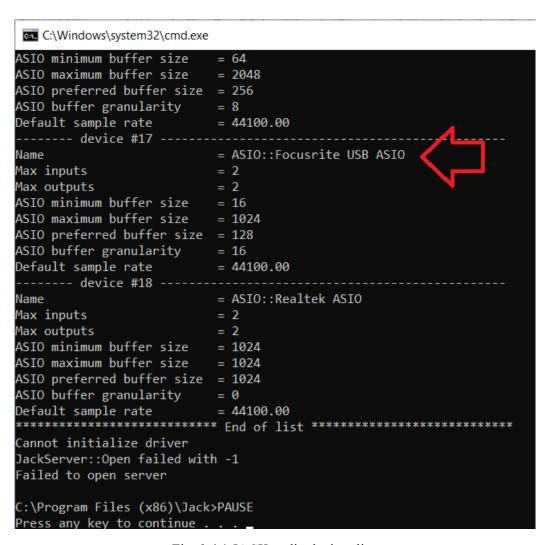   b. At endpoint A, change the IP address to the IPv4 address noted for endpoint B. At endpoint B change the IP address to the IPv4 address noted for endpoint A.

Fig. 0.4.1 JACK audio devices list.