NDI Test Tools v1

| Source Computer | NDI Network | Test Computer |

NDI Sync Test

This test will allow you to check the path through an NDI network and will measure the degree to which the audio and video remain in synchronization through the entire NDI pipe-line. This is done by running an application on a Source Computer which will put out an NDI stream with a video flash and audio blip. On a Test Computer there is then a measurement application that will then measure how far out of sync these have become.

```
Source Computer  ───▶  NDI Network  ───▶  Test Computer
```

On the source computer you would run :

NDIlib_Sync_Send.exe 1080p60

This will put out an NDI source called "Machine Name (Sync Source)", you would then use this within any NDI processing chains and then allow to pass it through to output.

You can specify the video format that you wish, and can be most reasonable video formats.

For instance you could specify formats like 2160p59.94, 480p30, 576p25.

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```
Source Computer  →  NDI Network  →  Test Computer
```
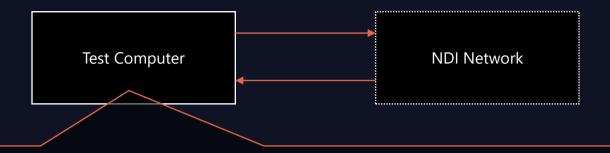
On the test computer you would run :

NDIlib_Sync_Recv.exe "Machine Name (Sync Source)"

This will now listen to that NDI source and will display the offset between the audio and video streams in milliseconds. It will also displayed the smoothed value for the offset which is more accurate as an average than any additional sample time.

NDI Latency Test

This test allows you to run a computer which will put out an NDI sync signal to the network. You may then pass this through any number of NDI processing devices and then the same application will monitor a stream coming back from the network and inform you of the current latency for audio and video seperately.

```
Test Computer                    NDI Network
```

On the test computer you would run :

NDIlib_Latency_Test.exe –f 1080p60 –i "My Machine (Channel 1)"

This will put out an NDI source called "Machine Name (Latency Source)" which would be at 1080p60, you would then use this within any NDI processing chains and then receive the video back on this machine under the channel name "My Machine (Channel 1)"

This application will then tell you in milliseconds what the delay is for the video and audio as it has passed through the NDI network. This can only measure latencies up to 1000ms reliably. We believe that anything with higher latency is probably sufficiently "long" that exact measurements are of little use!

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