KIWA Digital Ltd.

# **Nuendo** | User Guide

This guide provides information to help you connect to Nuendo with VoiceQ Applications.

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# VoiceQ and Digital Audio Workstations

## Overview

This guide describes the configurations and procedures used within VoiceQ and Digital Audio Workstations. It is designed for Audio Engineers to understand the operation and structure of both systems.

During the recording process, VoiceQ takes over the role of playing back the movie file from the DAW. You can leave the movie file loaded in your DAW session, but the track should be disabled to avoid competing with the VoiceQ Application.

VoiceQ superimposes the scrolling text on the movie and outputs it via the second DVI port of your Apple Mac video card (or the external DVI/Thunderbolt port on laptops). VoiceQ uses the Graphics Processing Unit (GPU) and the Memory on the video card to process the video, reducing the CPU load on your computer.

VoiceQ will chase and scrub while you work in a DAW. VoiceQ also has the option to cue the DAW when you select a line in VoiceQ. The selection will help locate the DAW session to the record location for the chosen line with an adjustable pre-roll value.

Recent improvements specific to VoiceQ Pro:

- GENMTC Support for accurate sync
- VoiceQ listens for 'Start, Continue, Play & Stop commands'
- Post-roll – Users can set post-roll in VoiceQ Preferences
- Mute Sound when Recording – mutes VoiceQ audio when recording
- Recording starts before a set time (See Preferences)
- Recording Icon added to VoiceQ Transport

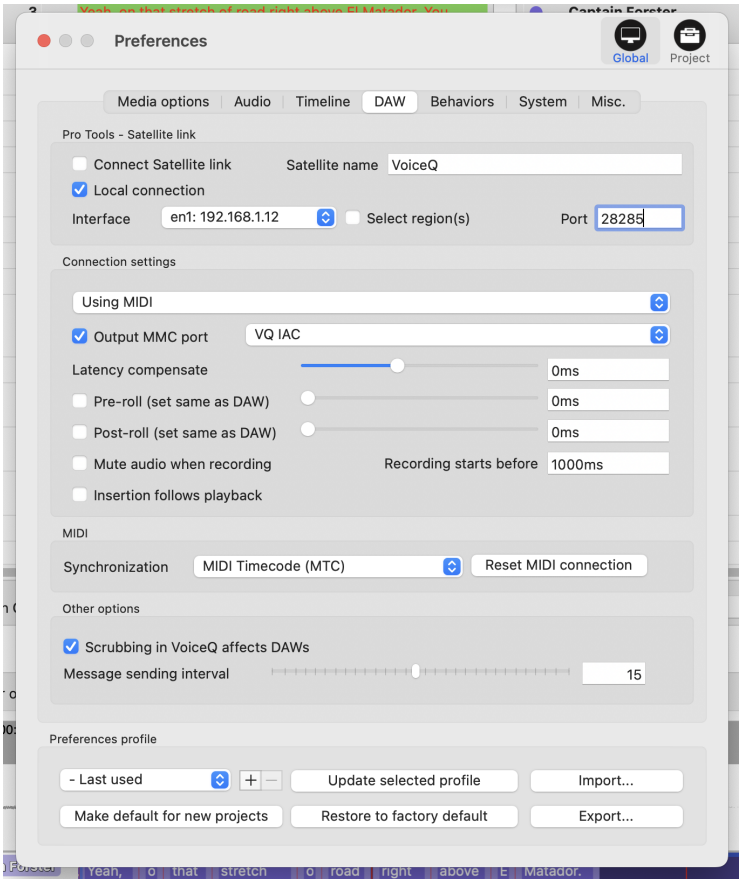
The actual recording of audio and management of playlists still takes place in your DAW using your normal process.

## Notes

- VoiceQ will work with many other recording applications in a single computer configuration, including Logic Pro, Nuendo, and Reaper.
- Check our website for the correct set-up instructions and screenshots for these applications.
- In a dual computer configuration, the Digital Audio Workstation may be any device that will output MIDI Time Code (MTC) and MIDI Machine Control.

## DAW Preferences (VoiceQ)

The preferences have been updated to allow easier user access to options for MIDI.




**Connect Satellite link** – Allows users to activate the AVID Satellite link between VoiceQ Pro and AVID Pro Tools.

**Satellite name** – Allows users to select the name of the AVID Satellite protocol.

**Local connection** – Allows users to choose to have AVID Satellite running on a local device. Deselect this checkbox if you wish to connect to another device on macOS or Windows.

**Interface** – This is where users can find their router connection to connect to other devices. *Note: If using the local link, the network chosen will match your current network connection.*

**Select regions(s)** – Allows users to select an area in Pro Tools. The option is great for setting loop recording. If deselected, the selection will choose the start position only.

**Option selection (MIDI/Rewire)** – Allows users to select either MIDI or ReWire connections. Note: ReWire will not be visible if not active or installed.

**Output MMC port checkbox** – Outputs MIDI/ReWire data and ignores any chase data sent from Reaper. This option is used if Reaper engineers need to make changes on the fly and not affect VoiceQ playback.

**MIDI device selection** – This dropdown lists all available external connections

**Latency compensation** – If playback is incorrect between VoiceQ and the set DAW. Users can adjust the latency using the slider.

**Pre-roll** – Users can now set pre-roll in Reaper and leave this option unchecked. This option is available if users wish to pre-roll when not connected to a DAW.

**Post-roll** – Sets the time the DAW records after the line is completed

**Mute audio when recording** – Mutes VoiceQ audio

**Recording Starts before** – Sets the time the DAW records before the line begins.

**Insertion follows playback** - Playhead follows from DAW in VoiceQ

**Synchronization** - The user can select either to output 'MIDI Timecode (MTC)' or 'Song Position Pointer (SPP).'

**Scrubbing** - Scrubbing allows users to choose the send interval using MIDI. *Note: Higher values can cause degraded performance on specific devices.*

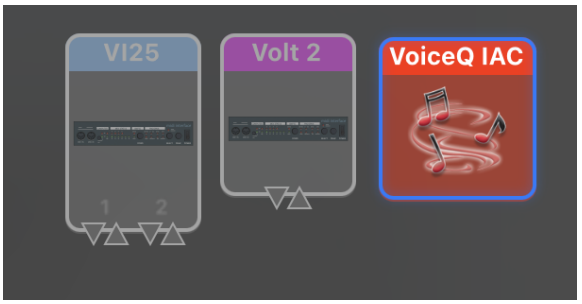
## Single Machine Setup (using IAC driver)

The Apple Inter Application Communication (IAC) Bus sends all MIDI information when VoiceQ and DAW are on the same computer – we refer to this as a Single Computer Configuration.

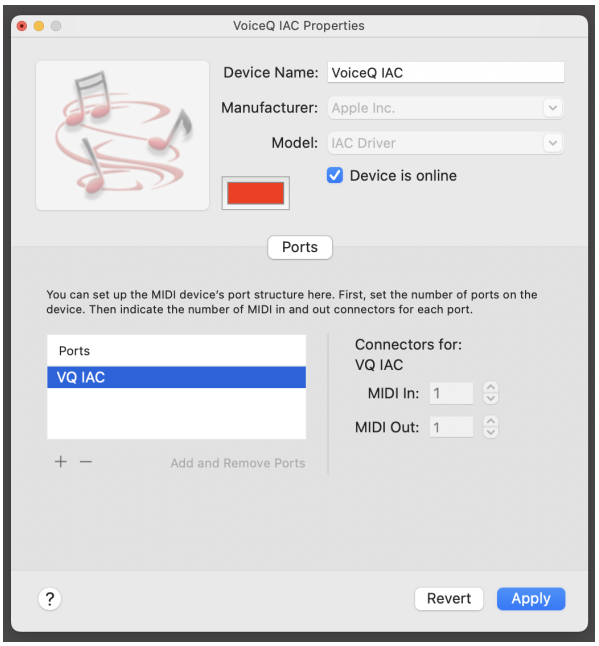
A MIDI interface or Network Session is used when the Digital Audio Workstation (DAW), in this case, DAW, and VoiceQ, are on separate machines (dual computer configuration). If you use a Dual Computer Configuration, you do not need the IAC Bus and can skip directly to the next section.

### Setting up MIDI Studio

1. Open MIDI Studio. It is located in Applications/Utilities/Audio MIDI Setup.app. Launch this app and select Window>Show MIDI Window (Command + 2) from the menu to open it.



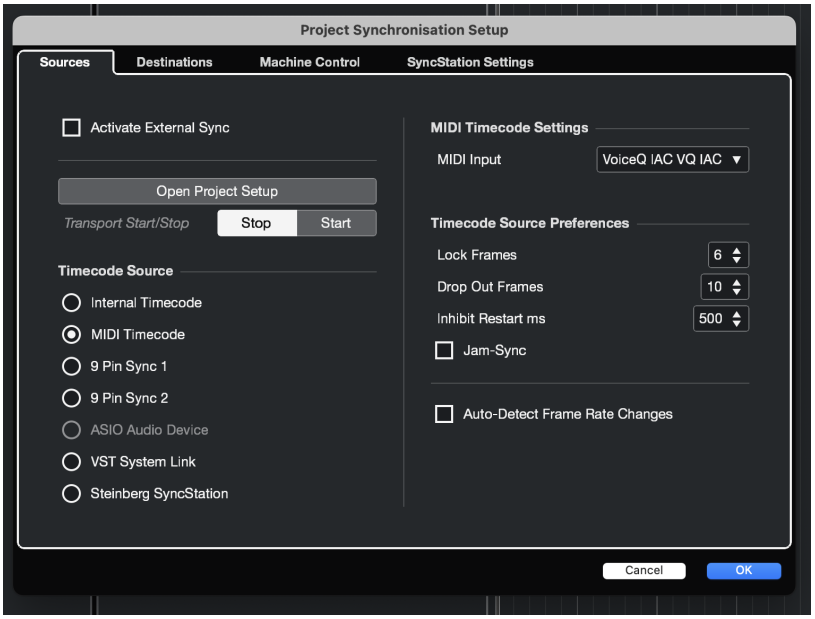

2. Select IAC Driver. Double-click it to open the IAC Driver Properties window.



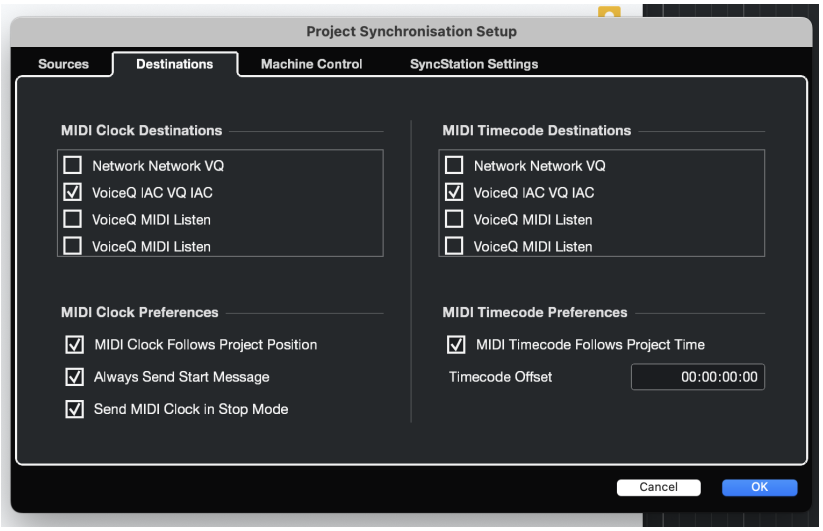
3. Add Ports by selecting the '+' button and giving the port a name. In this example, we named it 'VQ IAC'.
4. Click the 'Device is online' checkbox to enable this virtual MIDI device.

## Connecting MTC/MMC in Nuendo 12

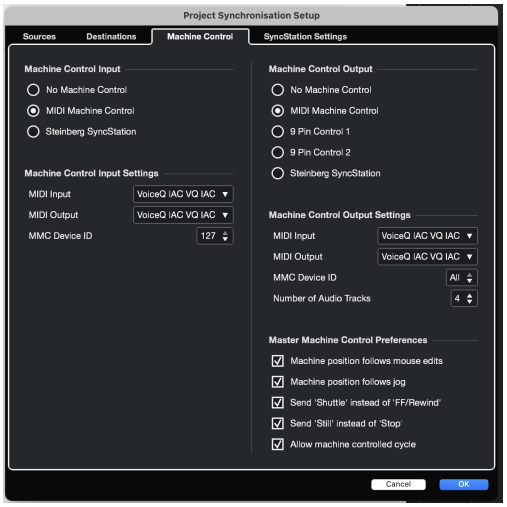
1. Open Nuendo and select 'Transport>Project Synchronisation Setup...'
2. In the Sources selection, choose 'VoiceQ IAC' in the 'MIDI Input' selection dropdown.



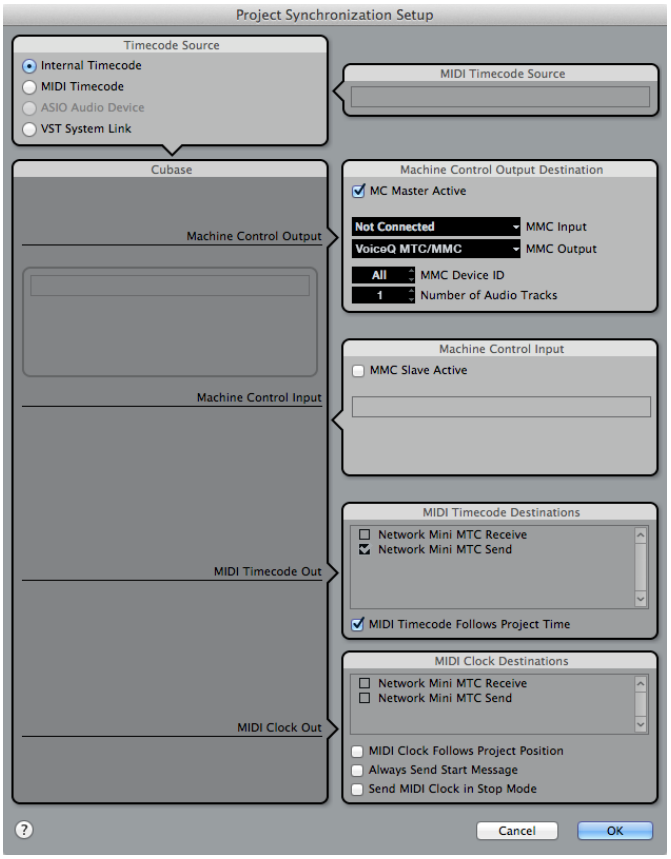

3. In the Destinations selection, choose 'VoiceQ IAC' as the MIDI Clock Destination and 'MIDI Timecode Destinations'.



4. Under 'Machine Control', select 'MIDI Machine Control' under 'Machine Control Input' and set the Input settings to 'VoiceQ IAC' with MMC Device ID set as 127.
5. Under Output Settings, select the 'VoiceQ IAC' and set the MMC Device ID as 'All'.



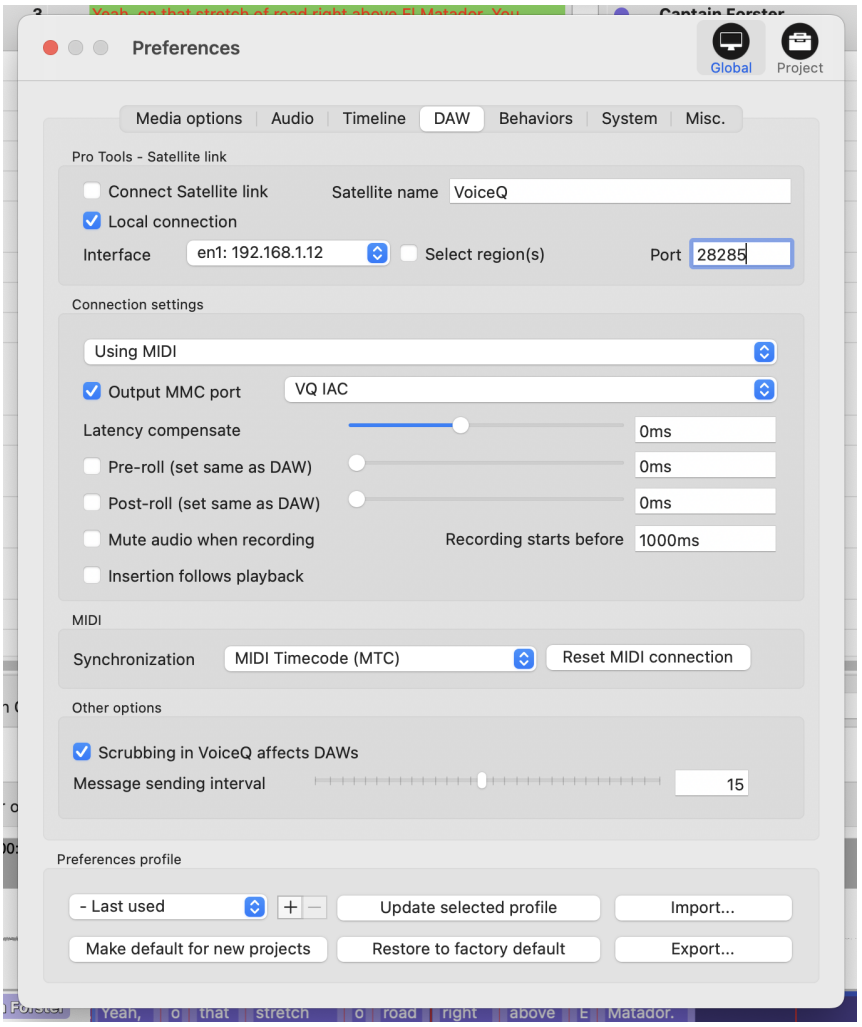

6. For previous versions of Nuendo 9/10/11, see the image below as a guide to follow:




7. Select 'OK' to close the window.

## Connecting VoiceQ

1. Launch VoiceQ and Open or create a new project
2. Select 'VoiceQ>Preferences/Settings' from the VoiceQ main menu.
3. Under 'Global> DAW', enable 'Output MMC Port' and select the 'IAC Driver' by name. In this example, it is 'VQ IAC'.




4. Select the MIDI Chase Icon in the lower left-hand corner of the VoiceQ Project window and press playback or select a line or position in the timeline.

**VoiceQ and Nuendo can now communicate through your virtual MIDI device.**

## Dual Machine Setup using Network

The Dual Computer Configuration is when Nuendo and VoiceQ are on separate computers with MIDI information sent via the Local Area Network (LAN).

With a Dual Computer Configuration, we can use Apple's MIDI network feature to send MIDI via the Local Area Network. This setup does not require any additional MIDI hardware. First, configure your LAN (if required), so the two machines can communicate and 'see' each other on the local network.

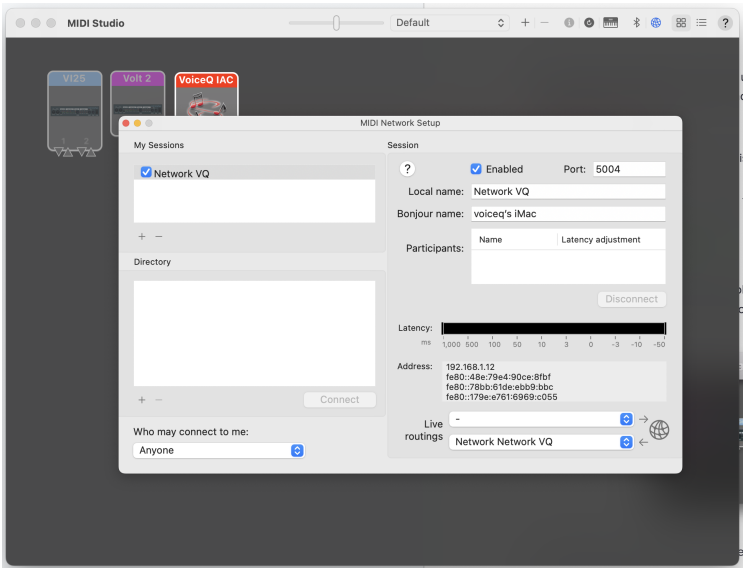
Contact your Systems Administrator for assistance if required.

### On the Mac, running Nuendo/Cubase

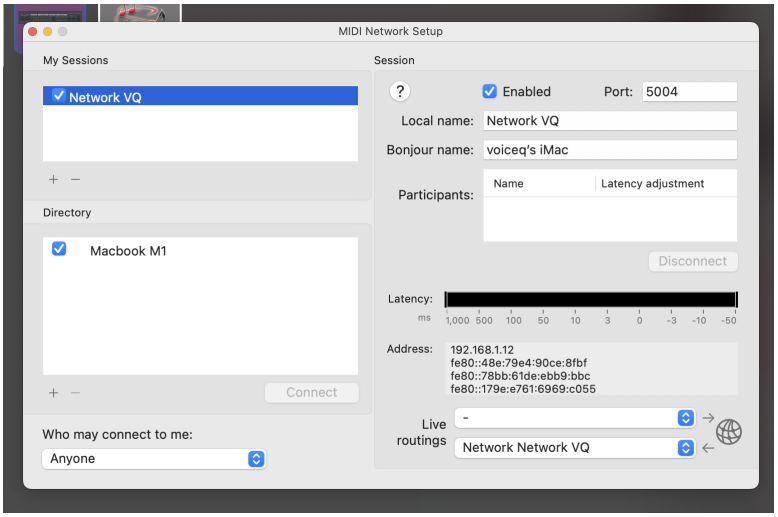
1. Open MIDI Studio. It is located in Applications/Utilities/Audio MIDI Setup.app. Launch this app and select Window>Show MIDI Window (Command + 2) from the menu to open it.
2. Select Network. Double-click it to open the MIDI Network Setup window.
3. Add a session by selecting the '+' button under My Sessions. Enable the session by clicking the Enabled check box under Session and name it. We are using the default name 'Session 1' in this example.
4. Select 'Anyone' from the drop-down list under the 'Who may connect to me' section.
5. Select this Network Session from the first drop-down list under the 'Live routings' section.

## On the Mac running VoiceQ

1. Open MIDI Studio. It is located in Applications/Utilities/Audio MIDI Setup.app. Launch this app and select Window>Show MIDI Window (Command + 2) from the menu to open it.



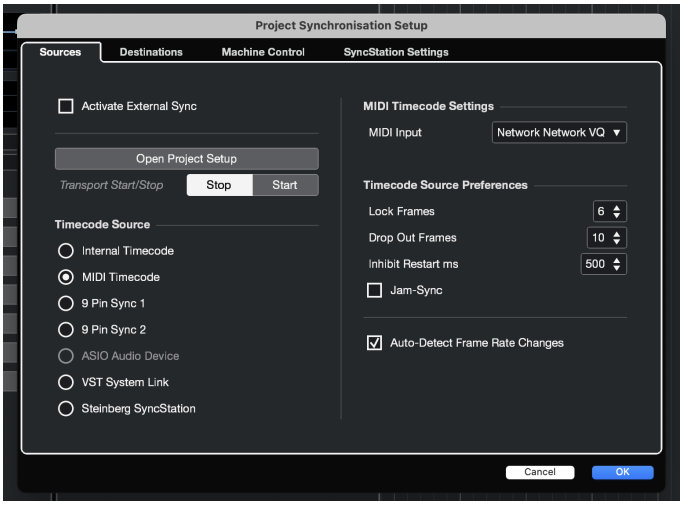

2. Select Network. Double-click it to open the MIDI Network Setup window.



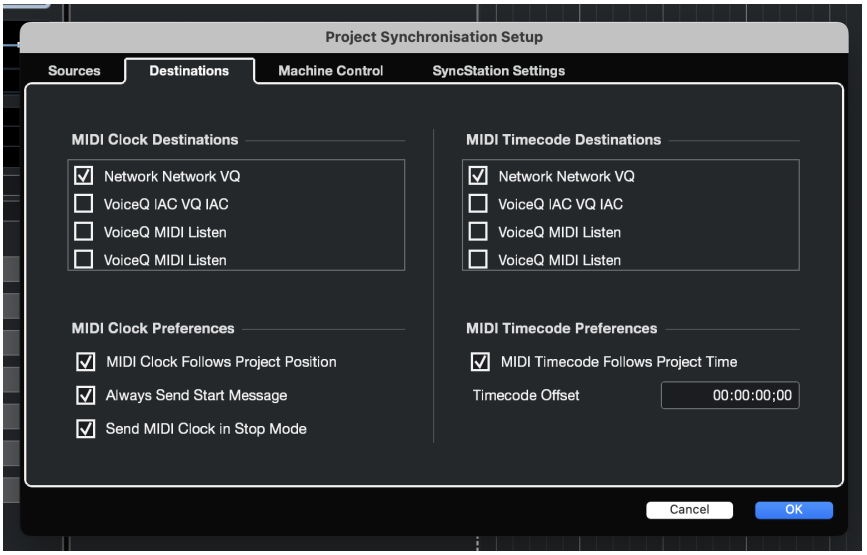

3. Add a session by selecting the '+' button under My Sessions. Enable the session by clicking the Enabled check box under Session. You must give the same name and port used in Step 3. Again, we use the default name 'Session 1' in this example.
4. You can see the Mac runs Nuendo from the Directory list. In our example, its name is 'Macbook M1'. Select the Mac runs Pro Tools from the list. Connect to it by clicking the 'Connect' button.

## On the Mac running Nuendo 12

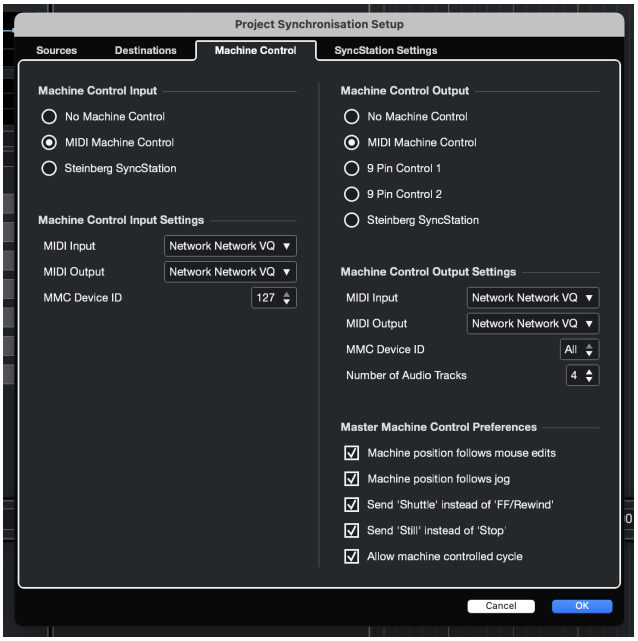
1. Open Nuendo and select 'Transport>Project Synchronisation Setup...'
2. In the Sources selection, choose 'Network VQ' in the 'MIDI Input' selection dropdown.



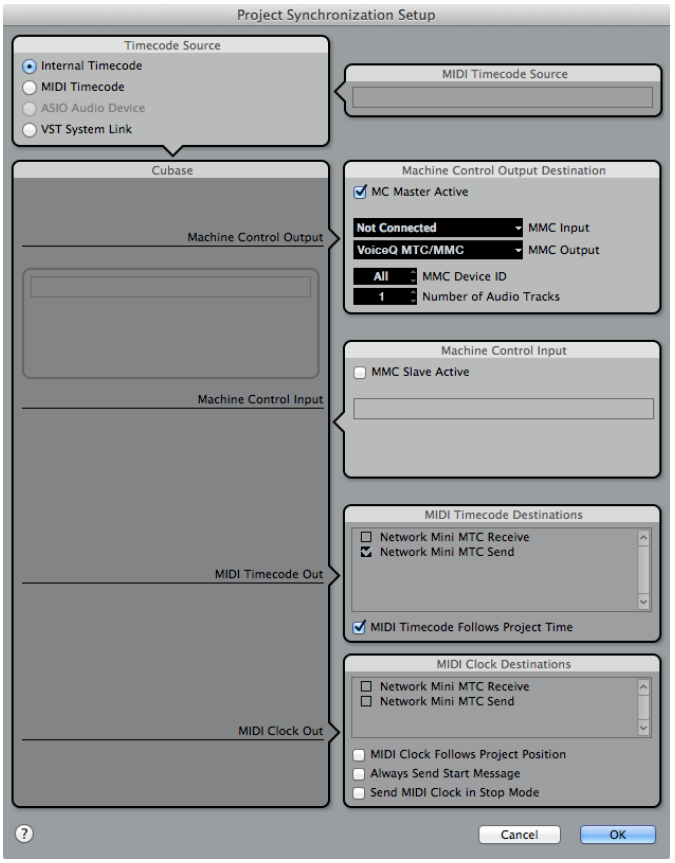

3. In the Destinations selection, choose 'Network VQ' as the MIDI Clock Destination and 'MIDI Timecode Destinations'.




4. Under 'Machine Control', select 'MIDI Machine Control' under 'Machine Control Input' and set the Input settings to 'Network VQ' with MMC Device ID set as 127.
5. Under Output Settings, select the 'Network VQ' and set the MMC Device ID as 'All'.



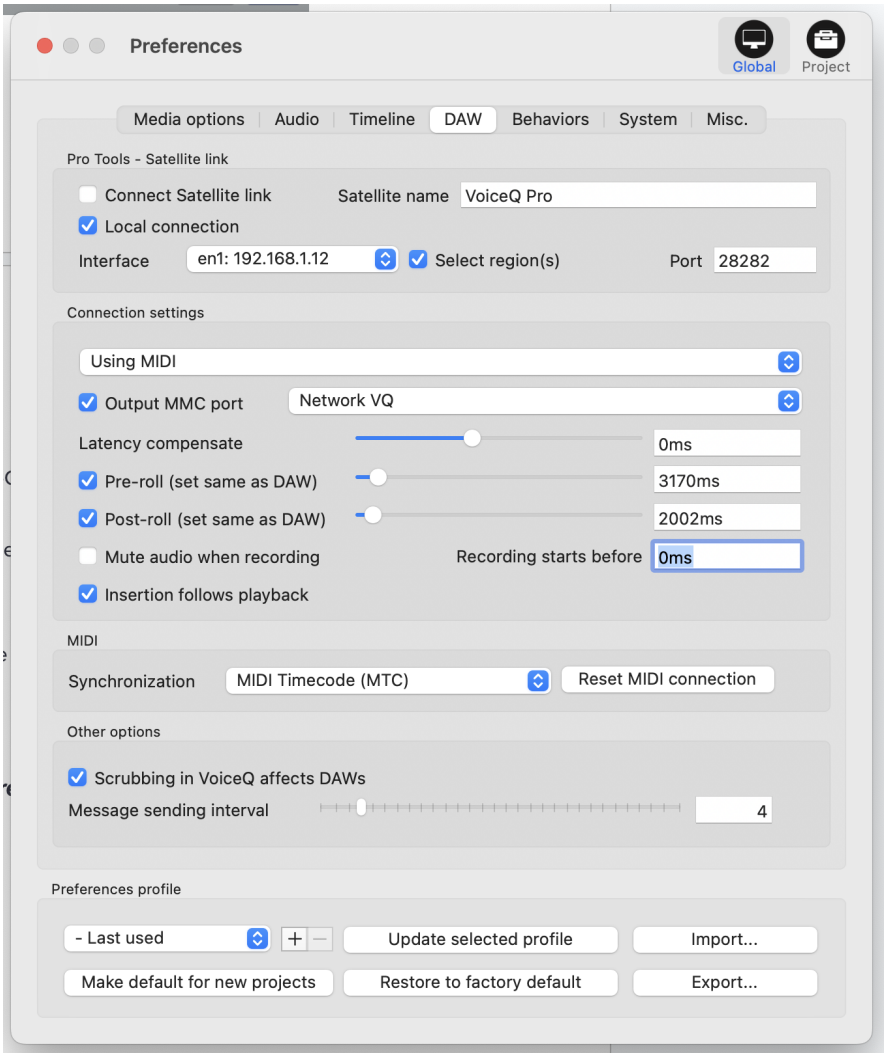

6. For previous versions of Nuendo 9/10/11, see the image below as a guide to follow:




7. Select 'OK' to close the window.

## On the Mac running VoiceQ

1. Launch VoiceQ and select 'VoiceQ>Preferences...' from VoiceQ main menu.
2. Enable Output MMC Port and select the Network session by name. This example is Session 1.




3. Select the MIDI Chase Icon in the lower left-hand corner of the VoiceQ Project window.

***VoiceQ and Nuendo are ready to communicate through your network (RTC-MIDI).***

***Note:*** *RTC-MIDI protocol used for this configuration is usually stable but does not guarantee zero packet loss. The latency and the possibility of packet loss may vary under your network conditions, especially when the network is congested, which may cause the latency and packet loss to increase.*

## Windows & MacOS - Dual Machine Setup using Network (rtpMIDI)

The Dual Computer Configuration is when Nuendo/Cubase and VoiceQ are on separate computers with MIDI information sent via the Local Area Network (LAN).

With a Dual Computer Configuration, we can use Apple's MIDI network feature to send MIDI via the Local Area Network to a Windows 10 device. This setup does not require any additional MIDI hardware. First, configure your LAN (if required), so the two machines can communicate and 'see' each other on the local network.

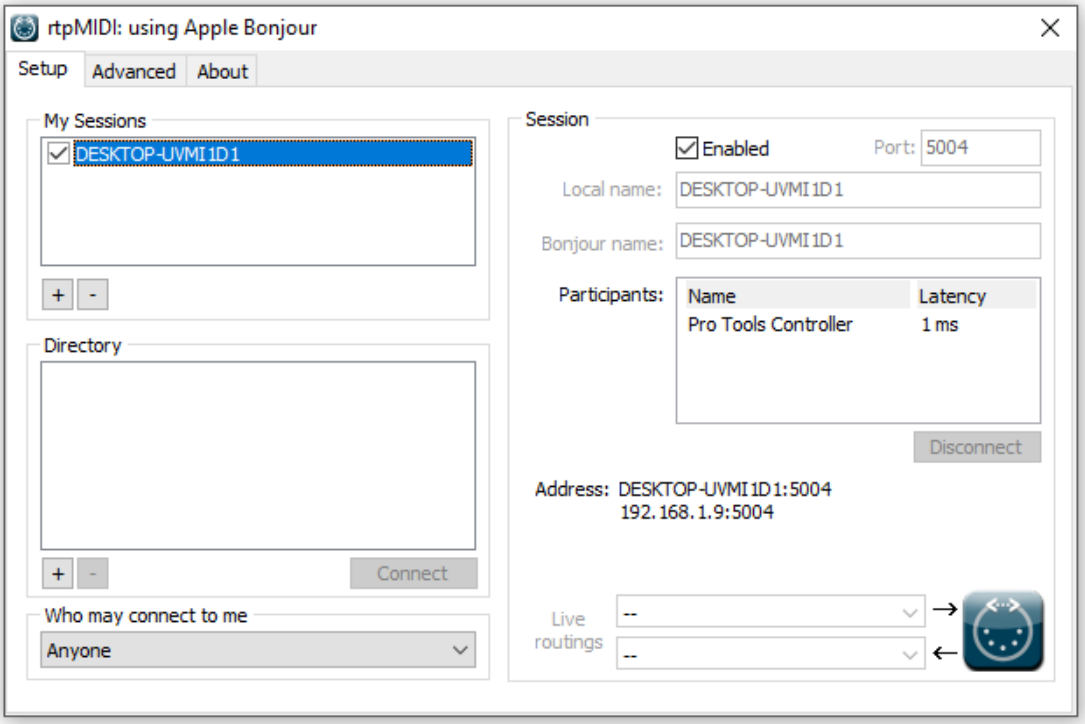
You will also need to download and install rtpMIDI from Tobias Erichsen from the following link: https://www.tobias-erichsen.de/software/rtpmidi.html.

- The rtpMIDI-driver is a virtual MIDI driver which allows DAW applications to communicate via a network with other computers. With this driver, you don't need to connect long MIDI cables between your music workstations. Compared to other MIDI over LAN or IP-MIDI solutions, this driver is based on an open standard.

**Contact your Systems Administrator for assistance if required.**

## On the Windows machine running Nuendo

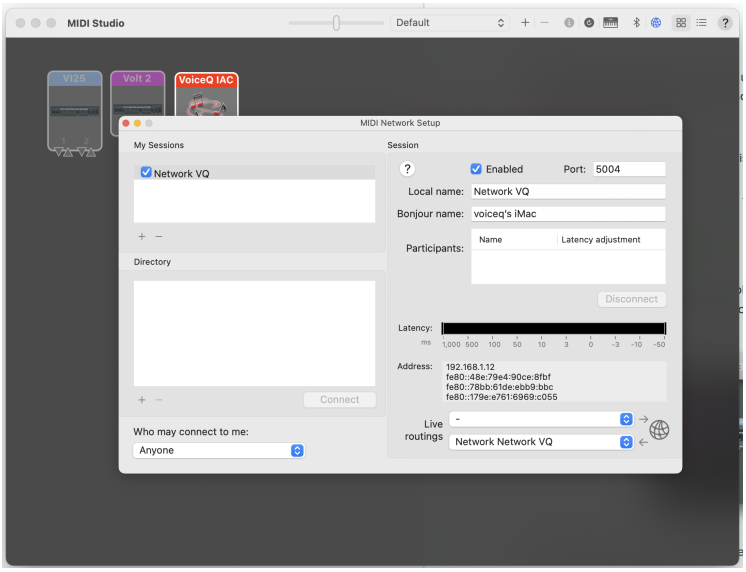
1. Install and Open the rtpMIDI application on your Windows device
2. Create a session similar to a MacOS device and select 'enable' – The system works like your Mac via a Bonjour service.



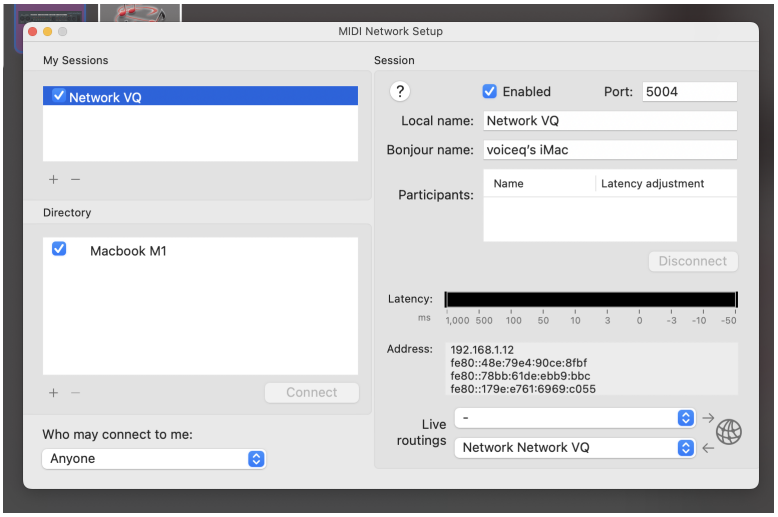

3. Add a session by selecting the '+' button under My Sessions. Enable the session by clicking the Enabled check box under Session and name it. We are using the default name of the computer, 'DESKTOP-UVMI 1D1' in this example – But you may name any desired file name.
4. Select 'Anyone' from the drop-down list under the 'Who may connect to me:' section.
5. Select from the directory the computer you wish to connect to.

## On the Mac running VoiceQ

6. Open MIDI Studio. It is located in Applications/Utilities/Audio MIDI Setup.app. Launch this app and select Window>Show MIDI Window (Command + 2) from the menu to open it.



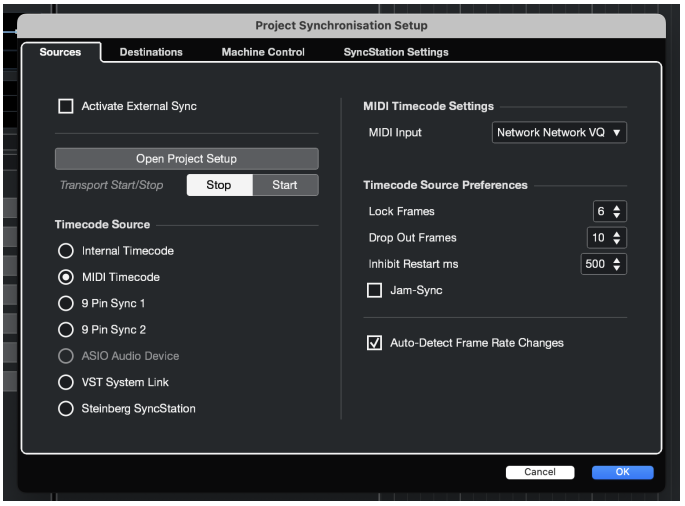

7. Select Network. Double-click it to open the MIDI Network Setup window.



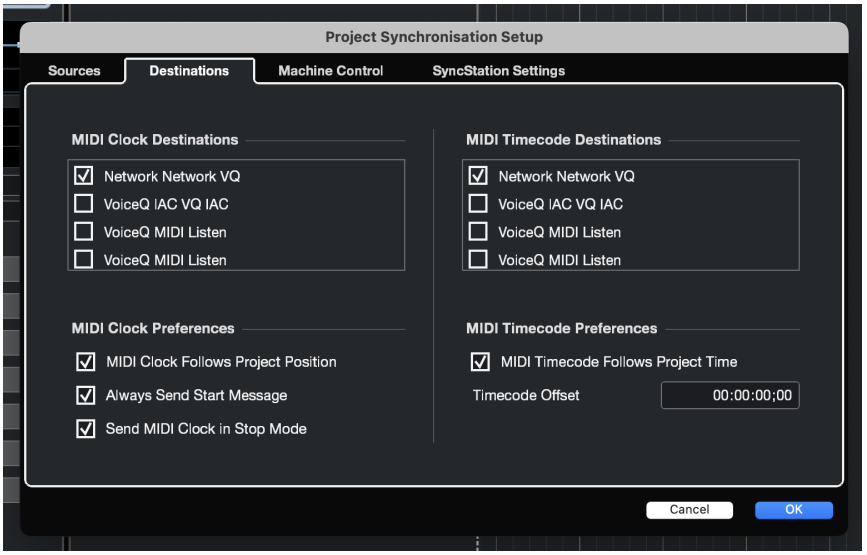

8. Add a session by selecting the '+' button under My Sessions. Enable the session by clicking the Enabled check box under Session. You must give the same name and port used in Step 3. Again, we use the default name 'Session 1' in this example.
9. You can see the Mac runs Nuendo from the Directory list. In our example, its name is 'Macbook M1'. Select the Mac runs Pro Tools from the list. Connect to it by clicking the 'Connect' button.

## On the PC running Nuendo 12

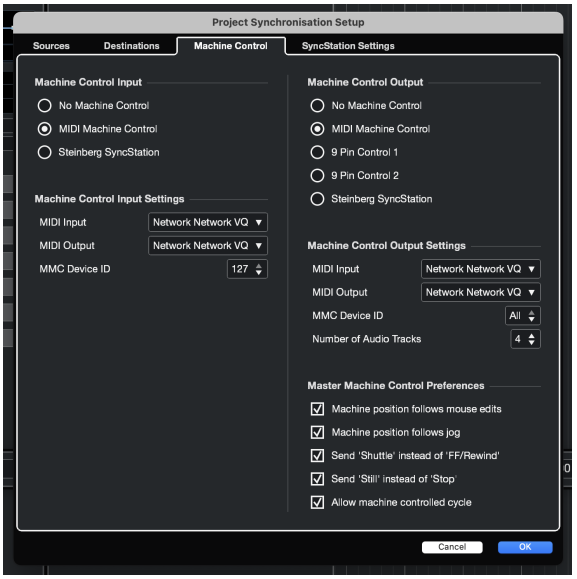
10. Open Nuendo and select 'Transport>Project Synchronisation Setup...'
11. In the Sources selection, choose 'Network VQ' in the 'MIDI Input' selection dropdown.



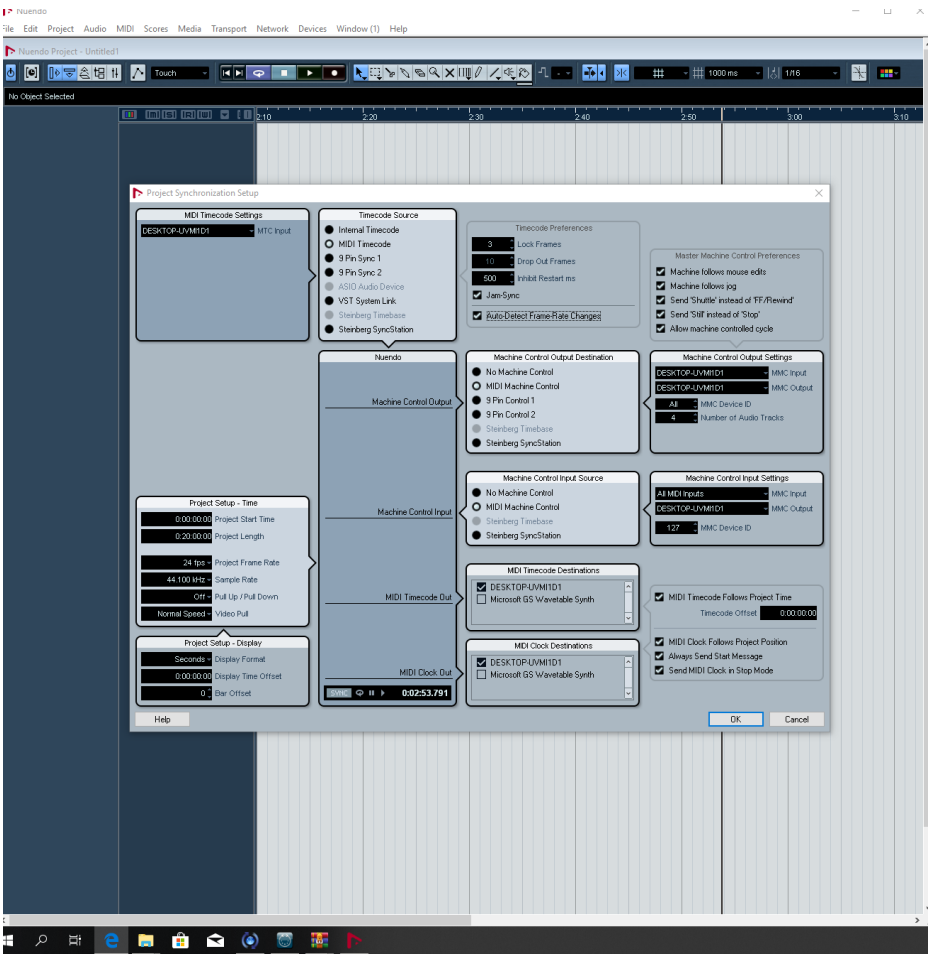

12. In the Destinations selection, choose 'Network VQ' as the MIDI Clock Destination and 'MIDI Timecode Destinations'.




13. Under 'Machine Control', select 'MIDI Machine Control' under 'Machine Control Input' and set the Input settings to 'Network VQ' with MMC Device ID set as 127.
14. Under Output Settings, select the 'Network VQ' and set the MMC Device ID as 'All'.



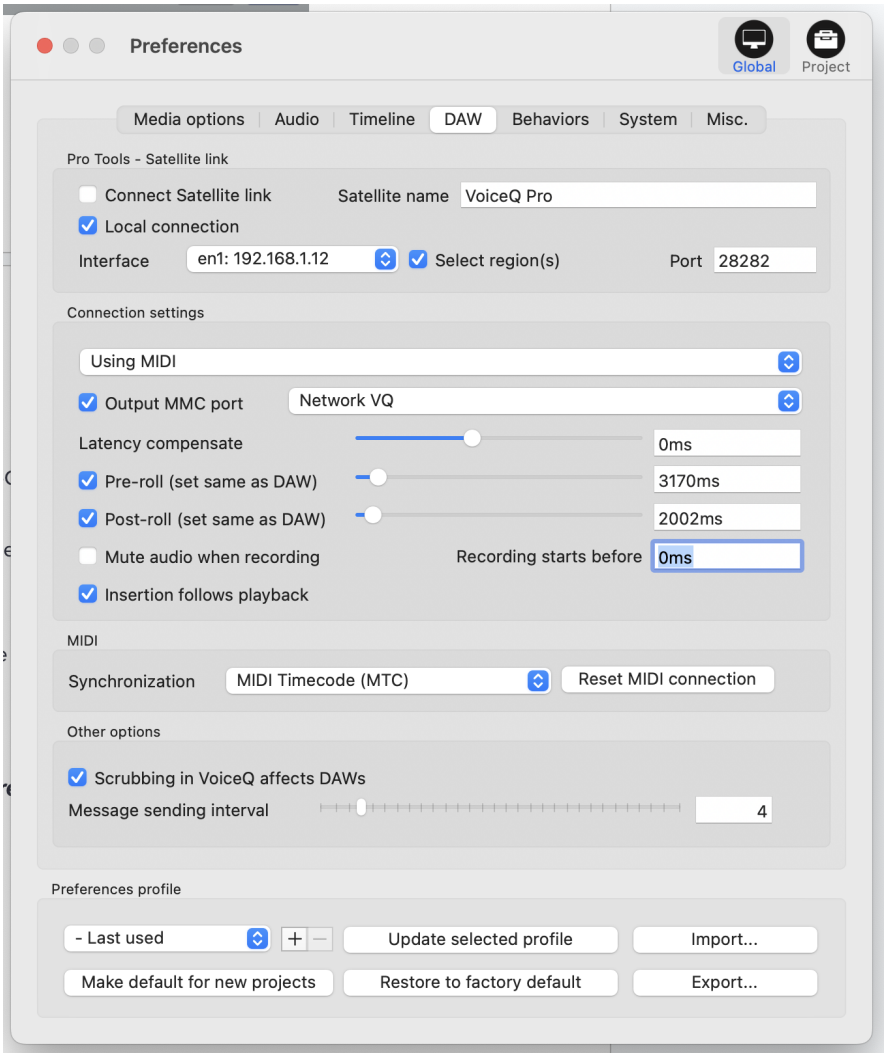

15. For previous versions of Nuendo 9/10/11, see the image below as a guide to follow:




16. Select 'OK' to close the window.

## On the Mac running VoiceQ

4. Launch VoiceQ and select 'VoiceQ>Preferences...' from VoiceQ main menu.
5. Enable Output MMC Port and select the Network session by name. This example is Session 1.




6. Select the MIDI Chase Icon in the lower left-hand corner of the VoiceQ Project window.

***VoiceQ and Nuendo are ready to communicate through your network (RTC-MIDI).***

VoiceQ and Nuendo are ready to communicate through your network (rtpMIDI).

## Dual Machine Setup using MIDI hardware interfaces

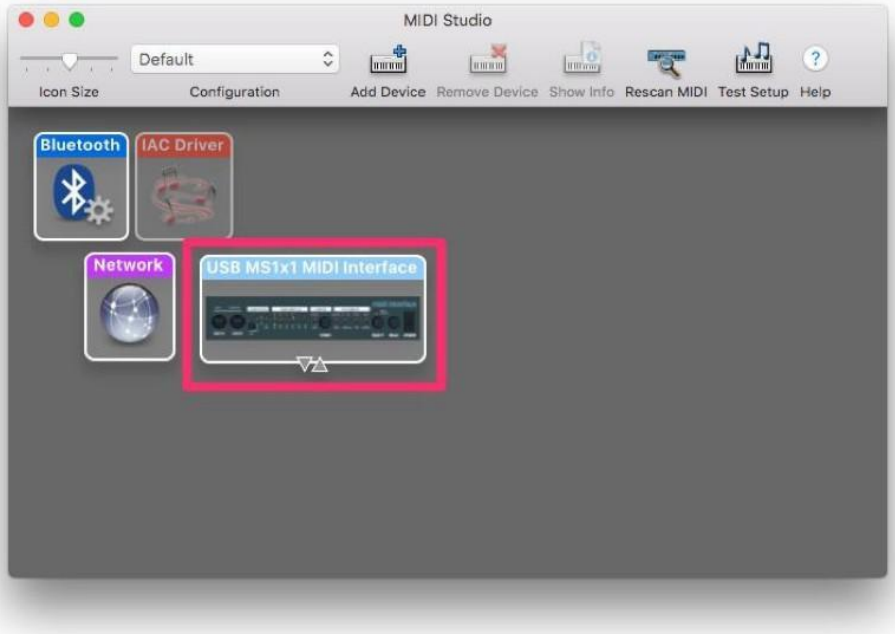
This setup allows users to run the application on separate computers for Nuendo and VoiceQ with MIDI information sent via MIDI hardware interfaces.

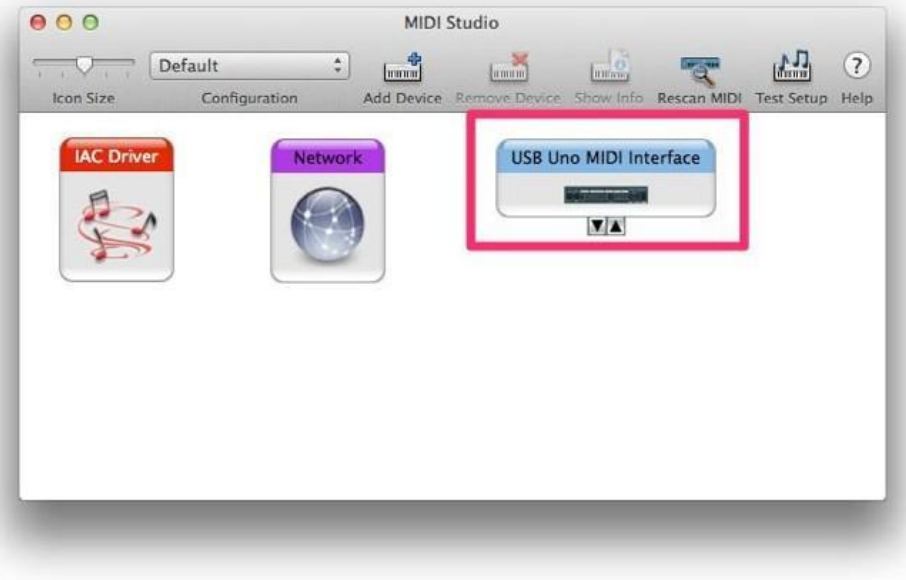
This configuration requires a MIDI hardware interface on both computers connected via a MIDI cable. Many AVID hardware boxes like the M-Box, Digi 001-003, Command 8, and Control 24 feature MIDI output ports.

The VoiceQ computer can use any standard USB MIDI interface, with VoiceQ automatically recognizing and chasing incoming MIDI timecodes when it is set to online/chase mode.

## Devices running Nuendo and VoiceQ

1. Connect both computers with the MIDI Device using the appropriate MIDI cables. The actual configuration may differ from the screenshots.
2. Open MIDI Studio. It is located in Applications/Utilities/Audio MIDI Setup.app. Launch this app and select Window>Show MIDI Window (Command + 2) from the menu to open it.

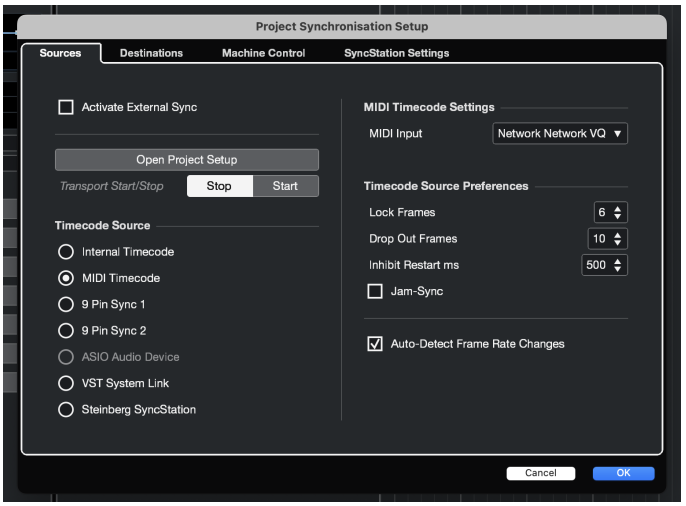




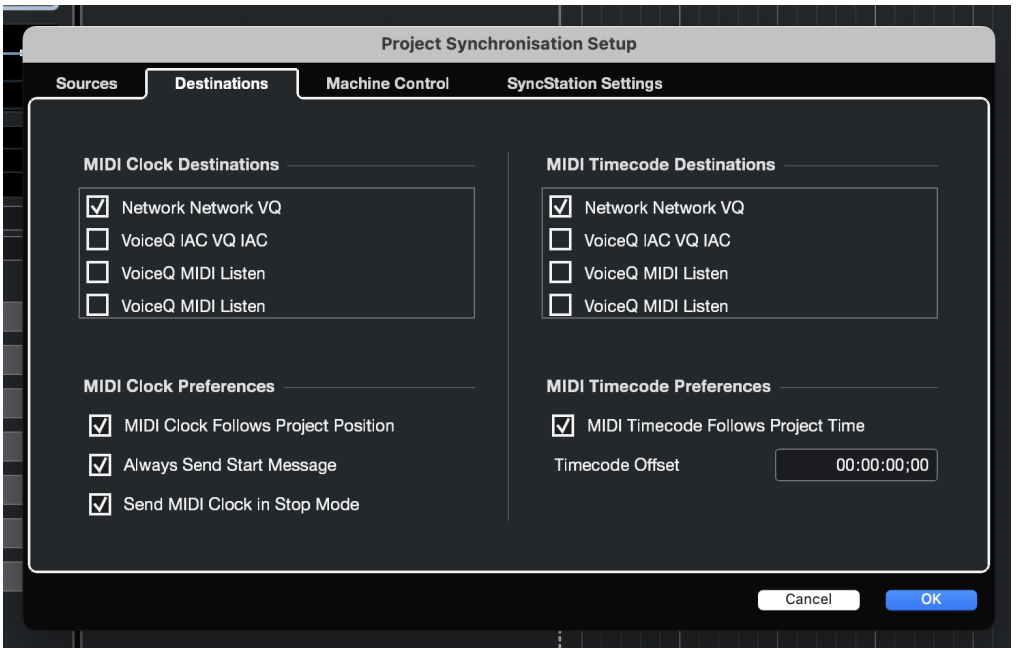

3. Check all your MIDI interfaces are shown in the windows of both machines. If not, click the `Rescan MIDI' button to rescan MIDI ports. In this example, we used USB MS1x1 MIDI Interface from M-Audio for the Nuendo machine and USB Uno MIDI Interface from M-Audio for the VoiceQ machine.

## On the Mac running Nuendo 12

4. Open Nuendo and select 'Transport>Project Synchronisation Setup...'
5. In the Sources selection, choose 'USB MS1x1 MIDI Interface' in the 'MIDI Input' selection dropdown.

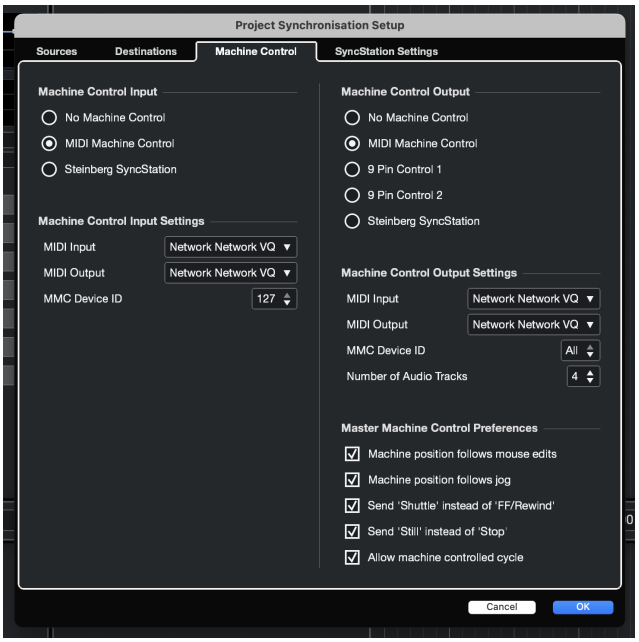



6. In the Destinations selection, choose 'USB MS1x1 MIDI Interface' as the MIDI Clock Destination and 'MIDI Timecode Destinations'.

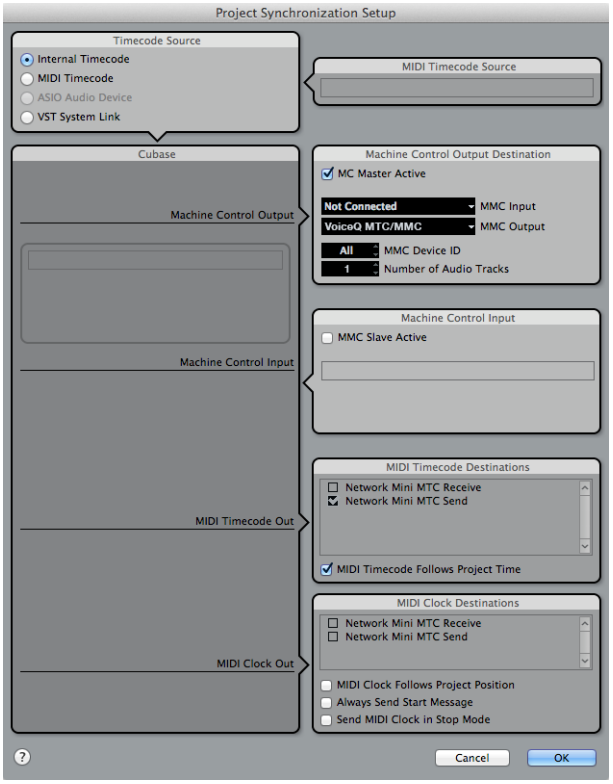



7. Under 'Machine Control', select 'MIDI Machine Control' under 'Machine Control Input' and set the Input settings to 'USB MS1x1 MIDI Interface' with MMC Device ID set as 127.

8. Under Output Settings, select the 'USB MS1x1 MIDI Interface' and set the MMC Device ID as 'All'.



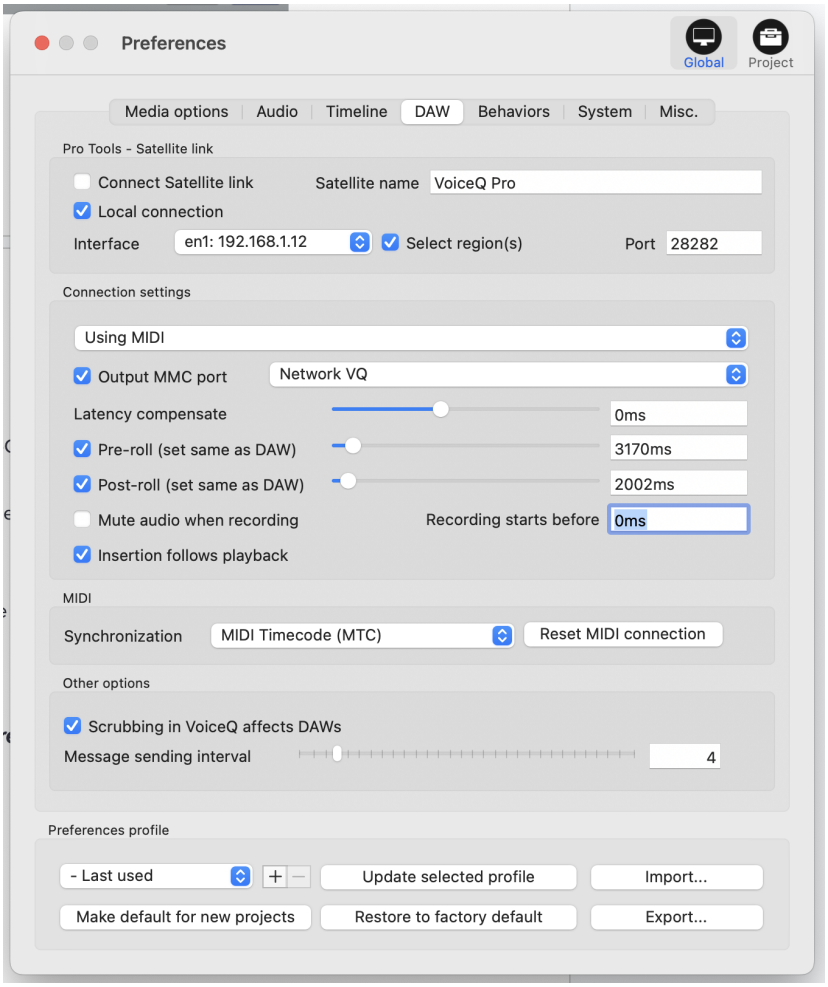

9. For previous versions of Nuendo 9/10/11, see the image below as a guide to follow:




10. Select 'OK' to close the window.

## On the Mac running VoiceQ

11. Launch VoiceQ and select 'VoiceQ>Preferences...' from VoiceQ main menu.
12. Enable Output MMC Port and select the Network session by name. This example is Session 1.




13. Select the MIDI Chase Icon in the lower left-hand corner of the VoiceQ Project window.

***VoiceQ will now chase the incoming MIDI timecode from Pro Tools through your hardware MIDI interface.***

VoiceQ will also scrub the video and scroll text in response to the MIDI machine control. A MIDI Beat clock is used for additional synchronization accuracy. The transport controls in VoiceQ can also be used, even when VoiceQ is waiting for an external MTC. To have VoiceQ chase incoming MTC from Pro Tools, click the `Chase External Timecode' button in the transport section or use the Quick Key ⌘J.