# How to Sync Transport Between DAWs in a SoundGrid Studio System

One of the advantages of the SoundGrid Studio System is the ability to run multiple host computers with different DAWs on the same network, and to route audio between them using as little as one SoundGrid I/O.

This guide explains how to sync the transport between two different DAWs running on two computers connected to the same SoundGrid I/O. We will focus on a few popular scenarios involving Pro Tools, Logic and Ableton Live. The instructions below are specific to Mac, but similar steps apply to PC.

1. Create a SoundGrid network by connecting to your SoundGrid interface.

In this example, DiGiGrid IOS is the audio interface.

DiGiGrid IOS

External Clock

	Ethernet
	Analog
	Clock

Host Computer   Computer 2   Computer 3   Computer 4
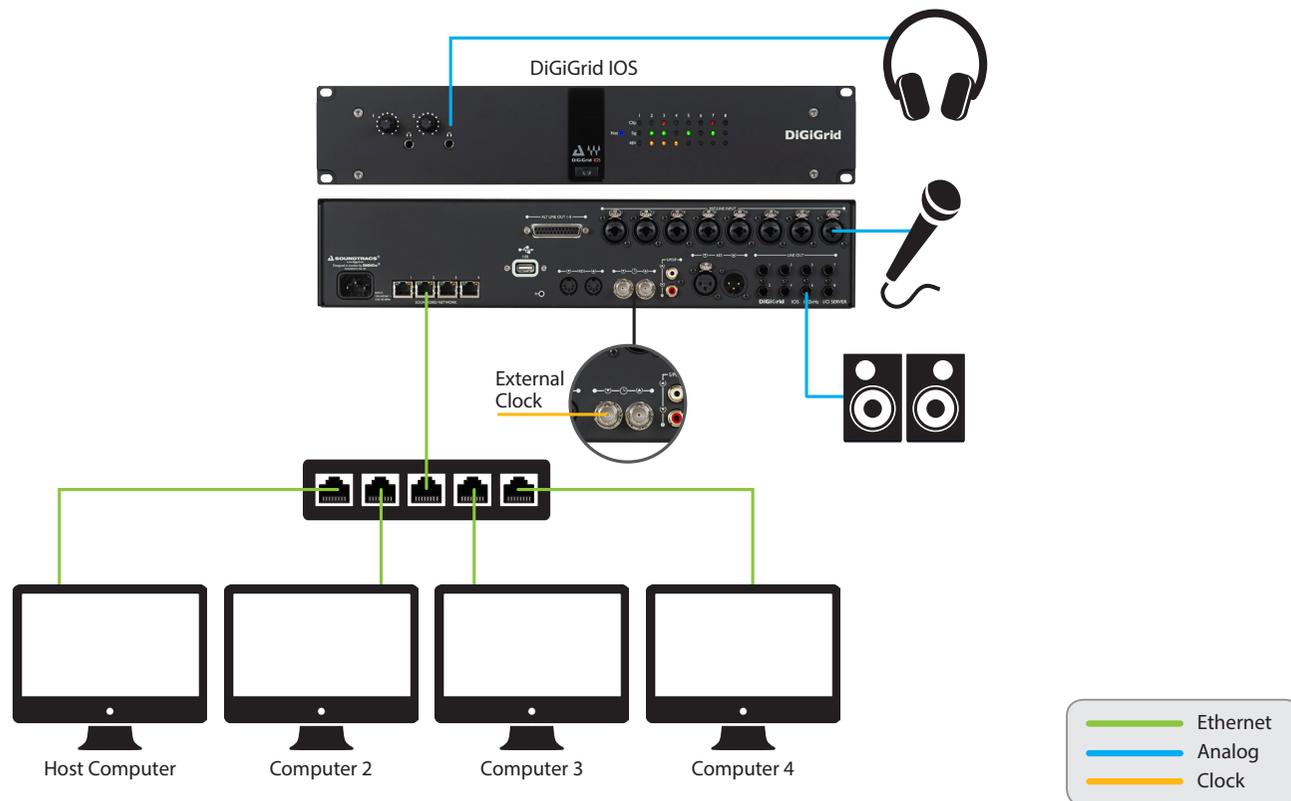
2. Set up a SoundGrid network on the master computer:

(a) Open the SoundGrid Studio application on the computer you want to designate as master.
On the Setup page, under RACK B – SOFTWARE I/O DEVICES, click ADD DEVICE, and assign the SoundGrid driver of the other (slave) computer. To learn more about assigning drivers, consult the SoundGrid Studio user guide.
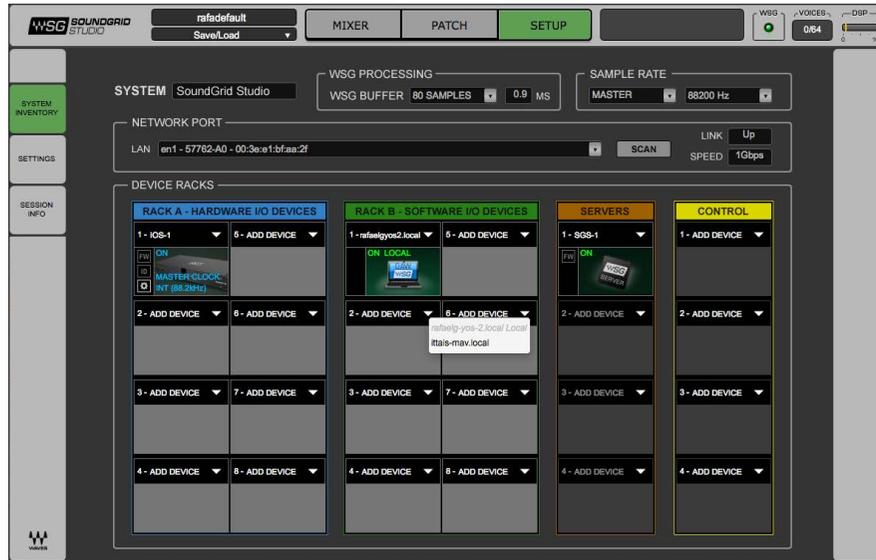
(b) Open Audio MIDI Setup in HD > Applications > Utilities.

(c) View the MIDI Studio by going to the Window menu and selecting Show MIDI Studio:

(d) Double-click on the Waves SoundGrid Network Driver:

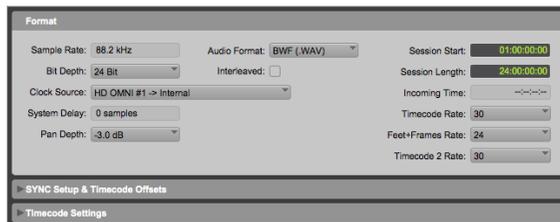(e) Do the following on the MIDI Network Setup page:
   - Top Left: Create a new session by pressing + (plus) and selecting the new session in the checkbox.
   - Top Right: Check "Enabled" to enable the session.
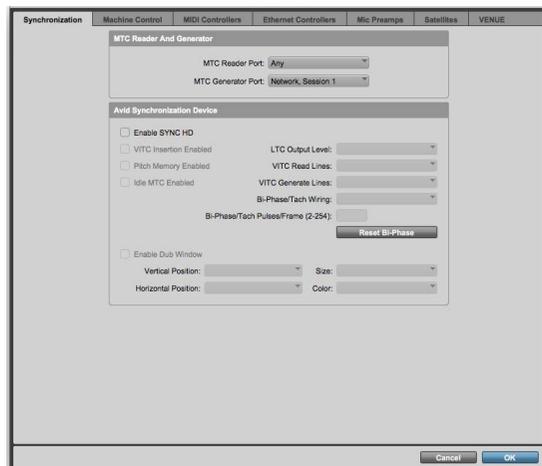   - Bottom Left: Under "Who may connect to me," choose "Anyone."
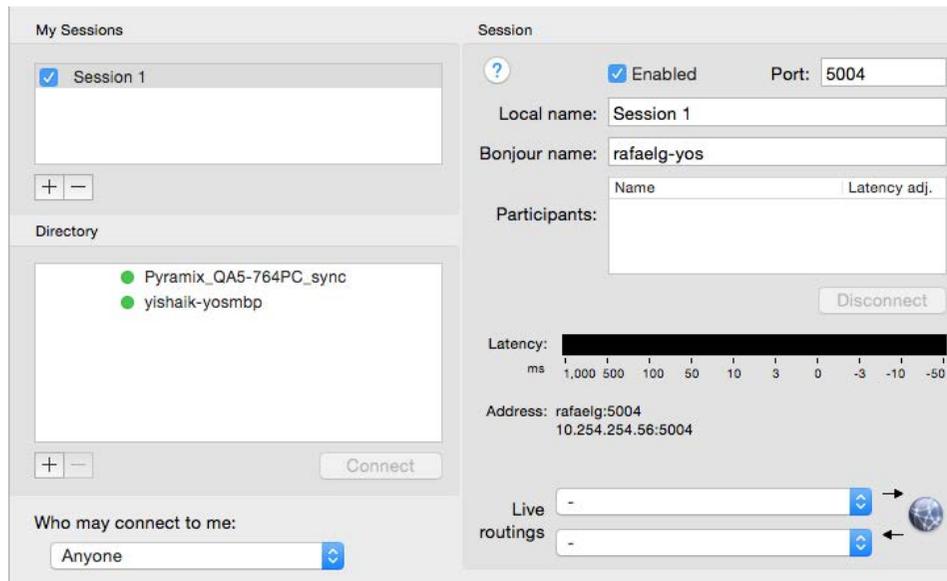
3. Open your DAW of choice on the master computer:

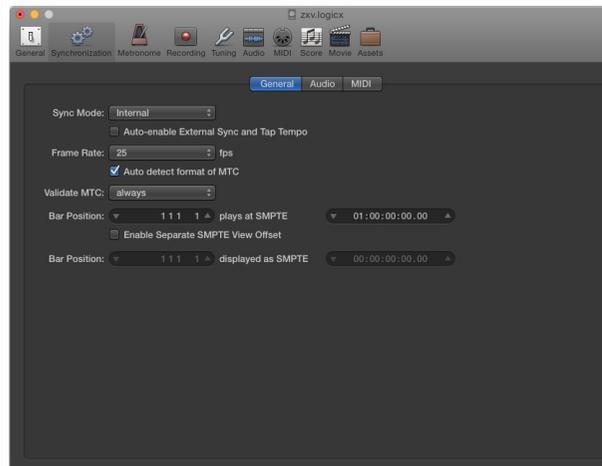| Pro Tools	Logic	Ableton Live
(a) Go to Setup > Session. In the upper right corner, change Session Start to 01:00:00:00. Verify the Time Code Rate you want to use (30 for audio only, 29.97 for NTSC video, etc.). (b) Go to Setup > Peripherals. Change the MTC Reader port to ANY. Set the MTC Generator port to "Network, Session 1" (or to whatever name you gave the session). 	(a) Go to Project Settings > Synchronization > General tab. (b) Set Sync Mode to "Internal." (c) Uncheck "Auto Enable External Sync." (d) In the Frame Rate drop-down menu, verify the Time Code Rate you want to use (30 for audio only, 29.97 for NTSC video, etc.). (e) Set bar position (1 1 1 1) to SMPTE 01:00:00:00. This ensures that Bar 1 is synced in both DAWs. 	(a) Go to the Preferences > MIDI Sync tab. (b) Set Remote to On. (c) In the Frame Rate drop-down menu, verify the Time Code Rate you want to use (30 for audio only, 29.97 for NTSC video, etc.). (d) Set bar position (1 1 1 1) to SMPTE 01:00:00:00. This ensures that Bar 1 is synced in both DAWs.
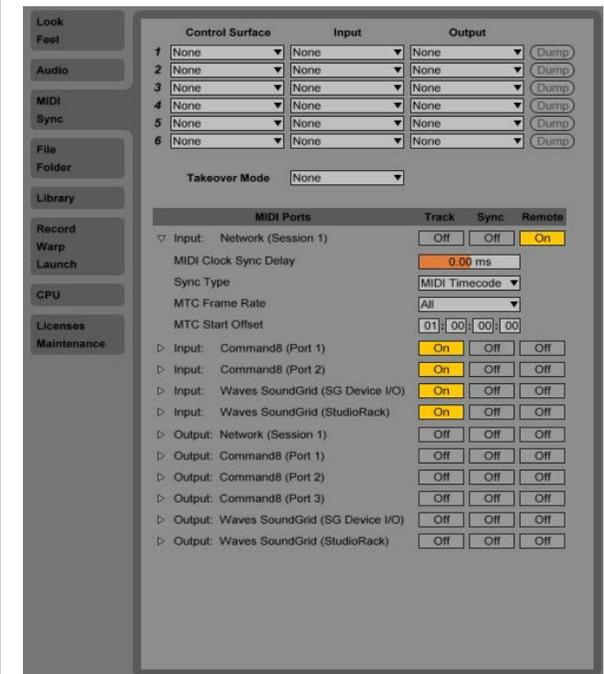
Pro Tools
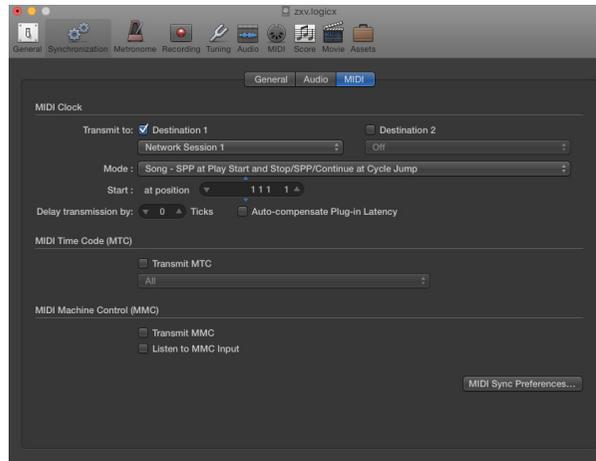
(c) Select Gen MTC in the transport bar.

If Gen MTC doesn't appear in the transport bar, you can add it.
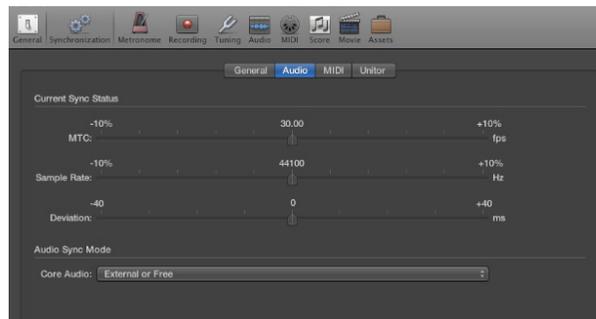

Logic

(f) In the MIDI tab:
   Check "Transmit MTC."
   Select "Network Session1" from the drop-down menu.

   tab, make sure that Audio Sync Mode is set to "External or Free" next to Core Audio.

4. Set up a SoundGrid network on the slave computer:

(a) In the computer you want to designate as slave, open Audio MIDI Setup in HD > Applications > Utilities.

(b) View the MIDI Studio by going to the Window menu and selecting Show MIDI Studio.

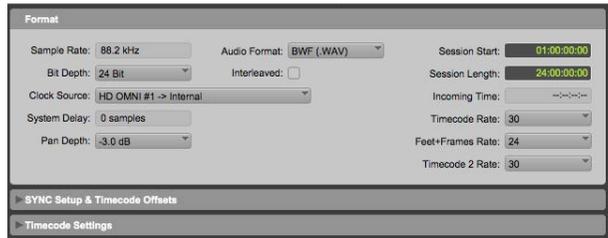(c) Double-click on the Waves SoundGrid Network Driver.

(d) On the MIDI Network Setup page, in the Directory window, choose the master computer and press Connect.
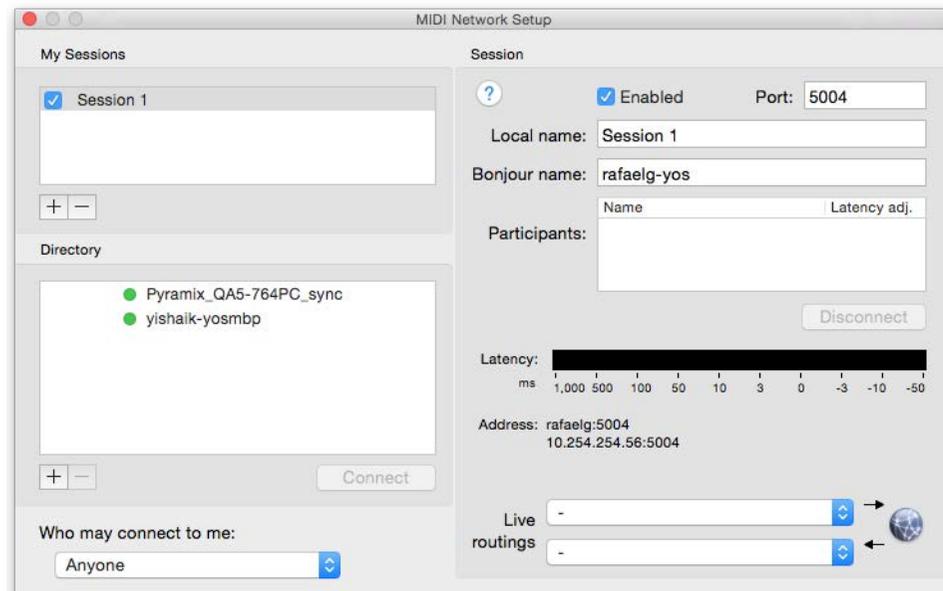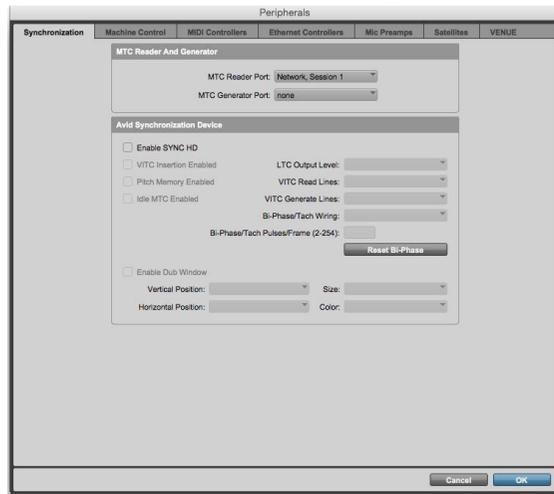
5. Open your DAW of choice on the slave computer:

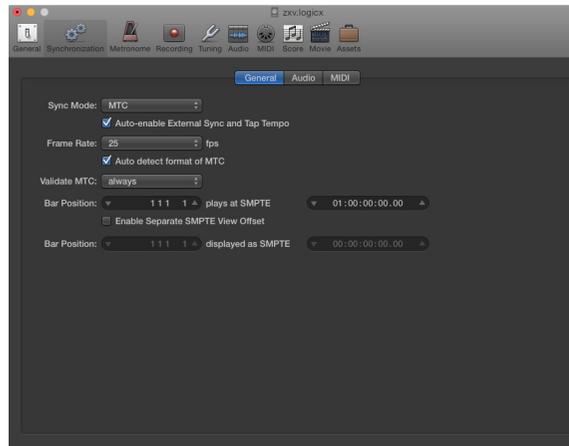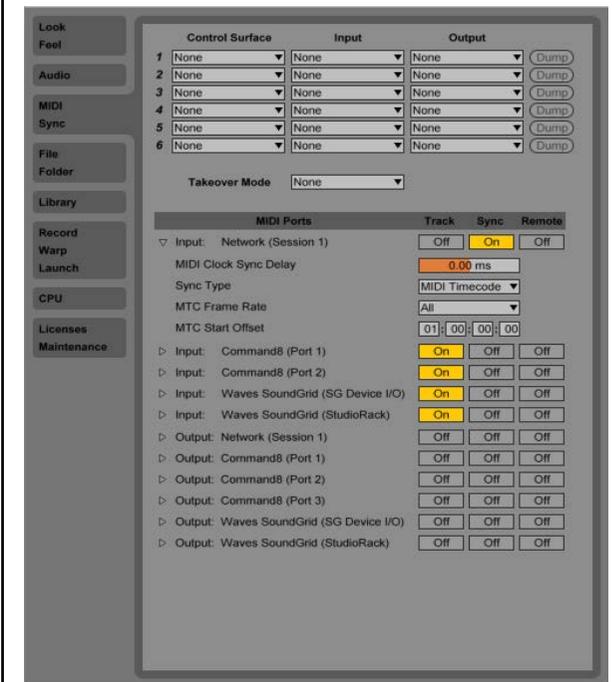| Pro Tools	Logic	Ableton Live
(a) Go to Setup > Session. In the upper right corner, change Session Start to 01:00:00:00, or the same time set in the master computer. (b) Go to Setup > Peripherals. Change the MTC Reader port to "Network, Session 1" (or to whatever name you gave the session). Set the MTC Generator port to "None."	(a) Go to Project Settings > Synchronization > General tab. (b) Set Sync Mode to MTC. (c) Check "Auto Enable External Sync." (d) In the Frame Rate drop-down menu, choose the same frame rate you set in the master DAW. (e) Set bar position (1 1 1 1) to SMPTE 01:00:00:00. This ensures that Bar 1 is synced in both DAWs.	(a) Expand the Network you are using to sync. (b) Select "Sync On." (c) Select MTC as Sync type. (d) In the MTC Frame Rate drop-down menu, choose the same frame rate that you set in the master DAW. (e) In MTC Start Offset, select the same option as in the master DAW. (f) Set bar position (1 1 1 1) to SMPTE 01:00:00:00. This ensures that Bar 1 is synced in both DAWs.

Pro Tools	Logic	Ableton Live
(c) Click on the clock icon in the upper left corner of the transport bar.	(f) In the MIDI tab, uncheck "Transmit MTC."	(g) On the main screen of Ableton Live, choose EXT to activate the external sync.

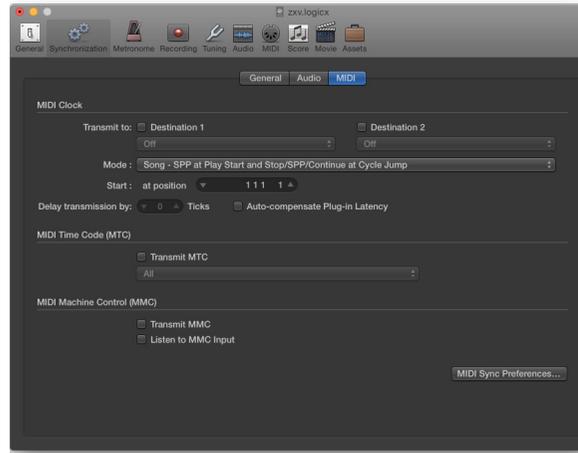(c) Click on the clock icon in the upper left corner of the transport bar.
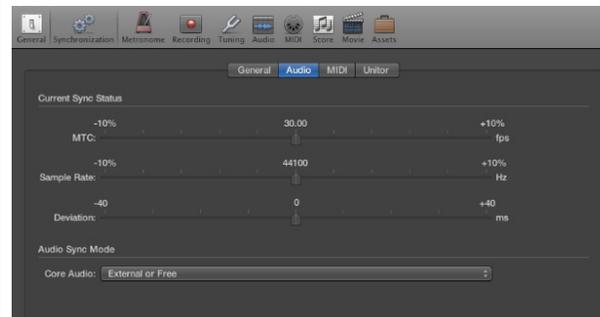
If you don't see the clock icon, you can add it.

(f) In the MIDI tab, uncheck "Transmit MTC."

(g) **Older versions of Logic:** In the Audio tab, make sure that Audio Sync Mode is set to "External/Free" next to Core Audio.

(g) On the main screen of Ableton Live, choose EXT to activate the external sync.

In all slave DAWs: Make sure that the slave DAW has the same sample rate as the master DAW.
In Pro Tools, set this when you create the session.
In Logic, set this in File > Project Settings > Audio.
In Ableton Live, set this in the Preferences window.

You should now be able to press play in the master DAW and have the slave DAW in sync.

Please note: To allow proper sync, it is always a good idea to allow for a bar or two before your audio/sequence actually starts. If your audio starts immediately, you may experience some glitches/hiccups at the beginning.