

TECHNICAL DOCUMENTATION

Configuring the WheatNet-IP PC Driver with RCS Zetta Automation

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Overview

WheatNet-IP brings added convenience and simplicity to the configuration of a PCbased automation system such as RCS Zetta. Where once it was necessary to employ a specialized sound card, discrete analog or digital audio wiring, a logic interface, and control cabling, with WheatNet-IP's PC Driver, we can accomplish all of this over a single Ethernet cable. The driver effectively acts as a WheatNet-IP BLADE, and lets the PC enjoy full access to all aspects of the WheatNet-IP intelligent network.

The driver is available in versions that offer one, four, eight, twelve, and twenty-four stereo input and output channels. For situations where discrete outputs from Zetta players are desired, we recommend at least the four-channel version of the driver.

It is assumed for the purpose of this document that your station has a WheatNet-IP network and a Wheatstone control surface in operation, although much of this is applicable to other situations as well. Should you run into trouble, please call Wheatstone technical support at (252) 638-7000 or email techsupport@wheatstone.com.

What You'll Need

Before you get started, it's a good idea to make sure you have all of the needed hardware and materials on hand. Here's a rundown.

Computer (PC)

8 GB RAM or higher

Gigabit Ethernet NIC

Second Gigabit Ethernet NIC (if using Zetta networking)

Minimum 1024 x 768 display with 16 or 32-bit color

Windows 7 Professional with Service Pack 1 32-bit or 64-bit supported

Wheatstone Software

WheatNet-IP PC Driver with license for appropriate channel count WheatNet-IP Navigator software for configuration and setup

RCS Zetta software (minimum needed for basic setup)

Zetta version 3.0 or higher

Hardware

At least one WheatNet-IP I/O BLADE

A WheatNet-IP native control surface such as the Wheatstone LX-24

A Gigabit Ethernet switch, if not already part of your WheatNet-IP network

Cat 6 cabling to tie everything together

Operating System & NIC Setup

Several Windows networking settings can affect the operation of the WheatNet-IP PC driver, and therefore should be configured before installing anything. The instructions below will apply to Windows 7 systems. Windows 8 settings are similar with slight differences in navigation.

Power

From the device manager, disable any features that allow the operating system to turn off either of the NICs to save power.



Address

Navigate to START -> Control Panel -> Network and Sharing Center. Click "Change Adapter Settings." Right-click the adapter that will be used for WheatNet-IP and select "Properties." Select "Internet Protocol Version 4" and click "Properties."

Here you will set the adapter's IP address. Generally this will be of the form 192.168.87.x, but you may use any private network address space. Since for this example we will be installing a WheatNet-IP PC driver we will add an IP address that is unused in our network. For this example we will use 192.168.87.219. The mask will fill itself in, and the default gateway and DNS addresses should be left blank. Keep this window open for the next step. The Network link must be up and IP assigned before running the driver setup program.

Internet Protocol Version 4 (TCP/IPv	4) Properties 🛛 🕺 🗙							
General								
You can get IP settings assigned auton this capability. Otherwise, you need to for the appropriate IP settings.	natically if your network supports ask your network administrator							
O Obtain an IP address automatically								
└ Use the following IP address:								
IP address:	192 . 168 . 87 . 199							
Subnet mask:	255 . 255 . 255 . 0							
Default gateway:	· · ·							
C Obtain DNS server address autor	natically							
└ Use the following DNS server add	resses:							
Preferred DNS server:	· · ·							
Alternate DNS server:	· · ·							
Validate settings upon exit	Advanced							
	OK Cancel							

Installing and Licensing the Driver

Our first step is to install the WheatNet-IP PC driver onto the computer.

First, ensure that the computer's Gigabit Ethernet NIC is connected to a switch, either standalone or part of your existing WheatNet-IP network. If the network adapter is not actively connected it will not be displayed in the configuration window below.

Now, simply run the installer and follow the directions carefully.

There are now two methods for licensing the WheatNet-IP PC driver. The first is the traditional USB hardware dongle. This dongle sets the number of channels licensed for the PC. The second method is a license file acquired from Wheatstone technical support.

If using the physical dongle for licensing, DO NOT plug the license "dongle" into the computer's USB port until instructed to do so during the installation.

When the installation is complete, you will be asked if you wish to run the configuration utility, and you should answer YES. You'll then see the driver configuration dialog:

Notwork Interfaces	Intel(D) Ciaphit (T Dackton Adaptor [102 16	97.010 -	Number of Changeles	0	
Network Interface:	Intel(R) Gigabit C	1 Desktop Adapter [192.160	0.07.219]	Number of Channels:	0	•
IP Address:	192.168.87.219	192.168.87.219			48 kHz	•
PC Blade ID:	219	* *		System ID:	1	•

In the "Network Interface" drop-down, select the Gigabit Ethernet adapter that will be connected to your WheatNet-IP network. You will see the IP address you assigned previously under "Address" section of this document. With PC BLADEs, we generally set the PC Blade ID to the last octet of the IP address you selected.

Set the "Sample Rate" to match the rest of your system.

The System ID should be left at 1.

Under "Number of Channels," you should set the number of channels your license dongle is authorized for. There will be a label on the dongle. If you are not using the dongle licensing method, then you can get this channel number from the license key file provided by Wheatstone technical support. To license the PC Driver using the license file, click the "Request License" from the configuration screen. You will see the License Key dialog:

e2winctl - Li	cense Key		×
<u>^</u>	You r	must register this product	t before it can be run.
-	Please obtain	call Wheatstone customer service a license key.	e at (252) 638-7000 to
Obtain a Li	cense Key	Enter a License Key	Continue

Click the "Obtain a License Key" Button.

e2winctl - License Key
Select a NIC card to bind your license to:
Intel(R) Gigabit CT Desktop Adapter [192.168.87.219]
Your license seed ID for this PC is:
1007/show7/68:05:CA:2D:35:6A/9888898D/
You must copy this seed ID and send it to Wheatstone customer support to obtain your license key for this PC.
If you have multiple PCs to install on, you may copy all of the seeds into one email and receive one license file for all of the PCs rather than multiple files.
Copy Close

Confirm the proper NIC card is selected in the first drop-down. Now copy the license seed key from the dialog box and click close. Paste the seed key into an email and send the email to <u>techsupport@wheatstone.com</u>.

Once you have received the license file from technical support click the "Enter a License Key" button. This will open the license Key dialog. Copy the text from the license file that you received from Wheatstone Technical Support and paste in the box a seen below.

e2winctl - License Key
<pre>Paste or drag your license file here: # This is a license file for a WheatNet-IP application. # The contents of this file are programmatically # generated and should not be altered lest the # file may become unreadable thereby invalidating # the license verification.</pre>
Generated: Thu Feb 26 19:24:13 2015
PROD WNIPPcDrv08 HOST show7 ENET 68:05:CA:2D:35:6A HDSN 9888898D DATE n/a BIND HOST ENET HDSN SEED 1707/show7/68:05:CA:2D:35:6A/9888898D/ LICK B1F6-08EBDB-56-518912-1C27E7
OK Cancel

When you complete the configuration and click OK, you'll see the following confirmation:



You can close this dialog; the driver is now installed and should be functioning correctly.

Installing WheatNet-IP Navigator

WheatNet-IP Navigator is a software application that serves as an all-in-one tool for setting up, managing, monitoring and controlling a WheatNet-IP network. You'll want to have it available so that you can set up audio routing, logic, and other features. You will probably wish to install Navigator on a machine other than the automation PC, such as a laptop that is connected to the WheatNet-IP network. Again, simply insert the disc and follow the directions. The software itself requires no configuration or setup.

Zetta Audio Device Setup

We need to set Zetta to send its audio through the WheatNet-IP PC driver. To do that, we'll need to run the Zetta application and access its settings.

First, ensure that no audio is playing, and click "Configuration" from the Zetta tool bar.

Now, click "Computers" from the drop-down. This will display the Computers configuration screen. Now click the Play Devices tab.

If this is an existing install you likely already have at least one computer defined. Configurations will vary from station to station and you should consult RCS Technical support for custom configurations. For our demo setup we have selected the "WASAPI Zetta Audio Engine" for the technology type. This is the recommended setup.

		Con	nputers					~
Computers							+	
Name		Description			Audition Player Streams			
DEMO								
ZETTA_DEMO					Audition			
Computer #22: ZETTADEMO								P
Details Audio Assignments Extern	nal Editors Gpio / Routes	Play Devices	Record Devices	Caching and	Playback Priority Logging	_	_	
4 , 4 ,	Device Name Z	ETTA_DE	MO Play	Device				
Status Name	Device Description RC	CS Local Play	Device ID: 134	6368293107	702 on ZETTA_DEMO .			
ZETTA_DEMO Play De	Technology Type Ze	tta Audio Engir	ne (WASAPI - Rec	ommended)	Advanced			
	Default Play Device (V	Vindows Defau	ilt) 🔻					
	Streams 24	** *	Purce unavailable					
	ID Chart Name Ct	© N	Diau Daviar					*
	281 1 Stream	n ivame	WNIP Output	1 (Wheatstor	e Network Audio (WD)			=
	201 1 Stream	m 2	WNIP Output	2 (Wheatstor	e Network Audio (WDN +			
	283 3 Stream	n 3	WNIP Output	3 (Wheatstor	ne Network Audio (WDN 🔻			
	284 4 Stream	n 4	Speakers (Real	Itek High Defi	inition Audio) (WASAPI) 👻			
	285 5 Stream	n 5	Speakers (Real	ltek High Defi	inition Audio) (WASAPI) 🔻			
	786 6 Stream	n 6	Sneakers (Real	Itek High Defi	inition Audio) (WASAPR) 👻			*

For the Play Device you should now see the WheatNet-IP PC Driver devices available for selection in the drop-down. For our demo we have selected to use the first 3 playback devices available from the WheatNet-IP PC driver.

The "Short Name" is the label that appears next to the sequencer channel for the On Air Screen. This short name can be three characters. The "Stream Name" is how you would like to identify the stream to the system. This is useful to allow you to uniquely identify streams on a room-by-room basis. For our purposes we have named the streams Stream 1, Stream 2, and Stream 3. You may also want to add an additional play device for the Audition stream.

Now we need to set up the play containers. Click "Configuration" from the Zetta tool bar. From the drop-down select "Play Containers". There should be at least two play containers set up by default. We will focus on the "On Air" play container.

		Play Container	s	5
Name	Unique	On-Air		
<u>A</u> a +	<u>A</u> a +			
Audition	4			
FM Split	2			• + X Q
Hotkeys Stacks	3	R Normal (2 itoms)		
Internet Split	2	Burnese	Disuar	Stream Name
On-Air	3	Audio Types	Computer	Diav Davice
On-Air (2)	3			
On-Air (3)	3	(All)	ZETTA_DEMO Play Device	Stream 1
Split Master	3	· · · · · · · · · · · · · · · · · · ·		WINIP Output 1 (Wheatstone Net)
		(All)	ZETTA_DEMO Play Device	Stream 2
			ZETTA_DEMO	WNIP Output 2 (Wheatstone Net
		Normal V (All)	ZETTA_DEMO Play Device	Stream 3
		✓ * * *	ZETTA_DEMO	WNIP Output 3 (Wheatstone Netv

If you need to add playback stream mappings press the plus icon in the upper right of the dialog box. We need at least 3 playback stream mappings for our demo. In the "Player/Computer" column you will select the play device we created in the previous screen. It should now be available in the drop-down.

In the "Stream Name/Play Device " column you will need to select the appropriate streams for each mapping. These are the streams we created under the play devices previously. We have selected Stream 1, Stream 2, and Stream 3. Once you are done save your settings and exit the play containers dialog.

You may wish to add an Audition play container for cueing and editing cuts. For the "Audition" play container we used output 4 of the WheatNet-IP PC Driver. Save your changes and exit the Play Containers configuration.

Naming Sources

To make our new RCS Zetta outputs easy to find, we'll give them names using WheatNet-IP Navigator. When we start the program, we'll go directly to the PC Driver Blade. The label "BLDxxx" will identify the PC Blade. Once you have located the PC Blade click the "Sources" tab:



As you can see, under the "Name" column we set the signal names to Zetta 1, Zetta 2, Zetta 3, etc., by just clicking to highlight the old name and typing in the new one. These names are required to be eight characters or less in order to fit into the source name displays of control surfaces, X-Y panels, and other hardware devices on the WheatNet-IP network.

You will also see a location field next to the source name field. This location field can be changed to something that identifies where the PC is located or what location the audio source is dedicated to. For instance, you might set the location of the source for an on air studio to "On Air". This will help the operator locate the source signals easier when using control surface that can display our signal tree.



While we're at it, we can go to the Destinations tab and name the record inputs:

Now that we've named these sources and destinations, we'll be able to easily find them in Navigator's cross point routing displays.

Logic Configuration in RCS Zetta

So we don't leave three faders open all the time, we'd like the automation system to switch its own control surface faders on and off as the sequencer starts and stops. We can do this by adding settings for GPIO communication to and from Zetta.

Connecting to a Blade

First, let's enable communication to the WheatNet-IP PC Driver. Open Zetta and click "Configuration" from the Zetta tool bar. Click "Computers" from the drop-down. Now click on the "Gpio/Routes" tab where we will configure the logic inputs and outputs required. We will start by adding the Wheatstone GPIO device, clicking the plus icon on the left side of the configuration window. This will create the new GPIO device.

Configuring the WheatNet-IP PC Driver with RCS Zetta Automation

								Σ
			Computers					
Computers					[8	+	
Name	1	Description		A	udition Player Streams			
DEMO								
ZETTA_DEMO				A	udition			
Computer #22: ZETTADE	MO*	_	_	_				
Details Audio Assignments	External Editors	Gpio / Routes	Play Devices	Record Devices	Caching and Playback Prior	ty	Loggin	9
+ X 🖬 🖬								
Name	Enabled							
ТСР								
ACU-1	Gpio Device W	heatNet UIO		•				
UDP	Device Setting Fee	ed Through Devic	:e	Routes				
WheatNet UIO	JLC	Cooper (MCS2 or	MCS3)					
WheatNet UIO	Propertie	gitek AE						
	Mo	onitora						
	Des pre	onitora IP eh - Tipro	ſ					
	GPI Hold Til RS	232						-
	RS	232 Splits						
	Sei	aLevel 8011						
	Sei	aLevel 8012						
	SS	16.4		E				
	SS	4.2						
	SS	8.2 p						

The first thing we need to do is select the GPIO Device type. This list is in alphabetical order. Scroll to the bottom of the list where you will find the "Wheatstone UIO" entry. You can now name this device and add a description to help you identify it later if configuration changes are required.

Now we need to fill in the IP address of the BLADE we wish to communicate with for logic control. In this case, it's the WheatNet-IP PC driver installed on the automation computer. To set up the communication to the WheatNet-IP PC Driver click the "Settings" button.

WheatNet UIO	x
IP Address: 192 . 168 . 87 .	219 : 55776
UMIX 1 (1-8) Mixer Number None 💌	UMIX 2 (9-16) Mixer Number None 🗨
Output Bus A	Output Bus 🛛 🗸
ОК	Cancel

Here we'll put in this computer's own IP address, leaving the default port number (55776) already defined. You can leave the Umix settings as default. These are not used for the control functions we are currently setting up. Clicking the "OK" button will apply the changes.

Setting up GPIO

Next, we need to define the GPI Inputs needed to remotely start playback of each of the sequencer channels. Click the "GPI (Inputs)" tab. To add the logic inputs click the plus in the right corner of the GPI (Inputs) dialog. Here you will add each Input the sequencer needs to receive a start signal when the control surface channel is turned on.

					X
		Computers			
Computers					
Name	Description		Audition Player Streams		
DEMO					
ZETTA_DEMO			Audition		
Computer #22: ZETTADE	MO			_	Ρ.
Details Audio Assignments	External Editors Gpio / Routes	Play Devices Record Device	es Caching and Playback Priority	/ Loggin	9
- + X 🔺 🖬					
Name	📝 Enabled				
ТСР	Colin Davies MilesetNet UIO				
ACU-1		•			
UDP	Device Settings GPIs (Inputs) (GPOs (Outputs) Routes			
WheatNet UIO				. ×	.
	News	CDI	Trianer French On		
	When the UIO #1 COI #1 11		Trigger Event On		- 11
	WheatNet UIO #1 [GPI #1] Le		Leading		
	Wheativet UIO #1 [GPI #1]Le	[GPI #10]	Leading	-	
	WheatNet UIO #1 [GPI #1]Le	ad [GPI #11]	E Leading	*	
	WheatNet UIO #1 [GPI #1]Le	[GPI #13]	Leading	Ť	
		[GPI #14]			
		[GPI #15]			
		[GPI #17]			

For our demo we need three GPIO inputs. They have been set up as GPI #9, GPI #10, and GPI #11. These GPI numbers are directly related to the SLIOs you will set up later in Navigator. You may want to make notes of what GPI you are using for each. This will help you when we move to the Wheatstone part of the configuration.

You should name these so that they are easy to find later in the setup process. Simply click in the Name box to edit the name.

The GPI Inputs are typically triggered on the leading edge. If triggering on the trailing edge is desire you can select this from the "Trigger Event On" column.

We now need to set up the GPO device that will turn the control surface channels on as the sequencer channels start playback. Start by clicking on the "GPOs (Outputs)" tab located next to the Input tab you just used.

For our setup we need to define two GPOs per sequencer channel. One will turn the control surface channel "On" and the other will turn it "Off". As you can see we have defined 6 GPOs in the configuration below.

Add the GPOs by clicking the plus sign in the right section of the configuration window.

You can now set the name, again keeping it simple to make it easy to identify these later in the setup process. Select the GPO you wish to use in the drop-down in the GPO column, making notes of which GPOs you are using for each function.

			Computers							
Computers									+	
Name	0	Description			Au	dition Play	er Streams			
DEMO										
ZETTA_DEMO					Aue	dition				
										_
Computer #22: ZETTAD	EMO	_	_		_		_			Ρ.
Details Audio Assignments	External Editors	Gpio / Route	es Play Devices	Rec	ord Devices	Caching	and Playback Prior	rity	Loggir	g
- + X 🔺 🖬										
Name	Enabled									
ТСР	Cais Davies (Wh			_						
ACU-1	Gpio Device win	leativet UIU		•						
UDP	Device Settings	GPIs (Inputs)	GPOs (Outputs)	Rou	utes					
WheatNet UIO								•	ŀΧ	
	Name	GP	0		Event Action		Event Duration	1 N		
	WheatNet UIO	#1[GPO [0	GPO #1]	Ŧ	Turn on terr	porarily	•		0.30	
	WheatNet UIO	#2[GPO [0	GPO #2]	-	Turn on terr	porarily	Ŧ		0.30	=
	WheatNet UIO	#3[GPO [G	GPO #3]	*	Turn on terr	porarily	*		0.30	
	WheatNet UIO	#4[GPO [G	GPO #4]	-	Turn on terr	porarily	Ŧ		0.30	
	WheatNet UIO	#5[GPO [G	GPO #5]	-	Turn on terr	porarily	*		0.30	
	WheatNet UIO	#6[GPO [G	GPO #6]	-	Turn on terr	porarily	Ŧ		0.30	Ŧ

The "Event Action" drop-down allows you to choose how the GPO will be behave as it is triggered. For our setup we need to use the "Turn on temporarily" action. This will pulse the GPO for the duration selected in the "Event Duration" column. The default duration is sufficient for our needs so we have left it as is.

You can now exit the Computers configuration screen making sure to save the new settings.

Command Mapping

Now that we have both our GPI and GPO devices defined we must associate them with the appropriate sequencer play out channels. We do this by selecting "Configuration" from the main Zetta tool bar. From the drop-down select "System". From here click the "Command Mappings" tab. This is where we will associate the newly created GPI and GPO settings with a command that Zetta will process.

					ystem					E
Zetta*										
Voice Tra	k and Quick Re	cord Sched	luled Maintenance	Autom	atic Backups	On Demand Recr	ordings Lo	tations	Conten	it Ingest
General	GSelector®	Wancasting	Billboard O	ther Audio	Audio Proces	sing Command	Mappings A	uto Load	Audio	> Format
*GPIO M	apping	and the second second						9 🖳	- T	
Name					Commer	nt		A	dd GPIO E	vent Map
II Tipro	UK Style				Descripti	ion				
🖬 GPIO	Mapping									E
4										
	GPIO I	Mapping								
	Assigned C	Computer: ZETT		Computer GP	IO Default			4	+	X
Input	Output									
Context	Enabled	GpiEvent	Ni	ame	Task			Settin	igs	
1				M						•

From the Input tab click the plus symbol to add the command mapping to start playback of the sequencer channel. This is where the naming we spoke of helps. In the drop-down list you should see the GPIs you created in the previous section. As you can see in the configuration below, the first 3 entries are the Inputs we created previously. Here we will define the GPI Event, Name, Task, and Settings for each.

The GPI Event is defined based on the configuration you have already done. The name should be something that helps identify it later.

The task drop-down presents you with many options. For our purposes we are going to use the "Sequencer.PlayNext.OnDevice". This task allows us to tell the next event to play on a specific sound device. You may want to use one of the many other options in the drop-down. If you are unsure, you should contact RCS Zetta technical support to discuss your options.

The "Settings" section will vary based on the task you have selected. Again, if you are unsure please contact RCS technical support for assistance.

Select the station we would like to apply these settings to and select the audio output device we would like to associate this GPI with.

			System					
tta*								
Audio Format Voice Track and Q	uick Record	Scheduled Maintenance	Automati	c Backups	On Demand	Recordings	Locations	Content Inge
General GSelector®	Wancasti	ng Billboard	Other Audio	Audi	o Processing	Comm	and Mappings	Auto Load
apping GPIO DEMO								3 📥 🖷 🗙
Name		Comment						
Cue Point Mapping								
Mapping GPIO DEMO		Description						
Tipro UK Style		Description						
Mapping GPIO	DEMO							
Description								
Assigned Computer: 7FTT		Computer GPIO Default					÷
Input Output								
niFvent	Name	Task	Settings					-
WheatNet UIO #1 [GPI #1] Leading	 Play 1 	Sequencer.PlayNext.OnDevice	 Station: 	RCS Hot AC 👻	Output Device	ZETTA_DEM	O Play Device - WI	VIP Output 👻
WheatNet UIO #1 [GPI #1] Leading	 Play 2 	Sequencer.PlayNext.OnDevice	 Station: 	RCS Hot AC 👻	Output Device	ZETTA_DEM	O Play Device - WI	VIP Output 👻
WheatNet UIO #1 [GPI #1] Leading	 Play 3 	Sequencer.PlayNext.OnDevice	 Station: 	RCS Hot AC 👻	Output Device	ZETTA_DEM	O Play Device - WN	NIP Output 👻 =
ettaControl <u>A</u> uto_Hot_AC	- Automation	Sequencer.Mode	 Station: 	RCS Hot AC 👻	Mode: Auto	•		
ettaControlLive_Hot_AC	- Live Assist	Sequencer.Mode		RCS Hot AC 👻	Mode: Live_A	Assist 👻		
ettaControl <u>M</u> anual_Hot_AC	- Manual	Sequencer.Mode	 Station: 	RCS Hot AC 👻	Mode: Manu	al 🔻		_
ettaControl <u>N</u> ext_Classic_Rock	 Next Rock 	Sequencer.PlayNext	▼ Station:	RCS Classic Ro	ck 🔻			
ettaControlPause_Classic_Rock	 Pause Rock 	Sequencer.Play.StopAll	▪ Station:	RCS Classic Ro	ck 🔻			
ettaControl <u>T</u> oggle_Classic_Rock	 Toggle Roc 	Sequencer.ToggleChainType		RCS Classic Ro	ck 👻			
ettaControl <u>A</u> uto_Classic_Rock	- Automation	Sequencer.Mode		RCS Classic Ro	ck 🔻 Mode: 🖌	Auto 👻		
ettaControlLive_Classic_Rock	- Live Assist	Sequencer.Mode	- Station:	RCS Classic Ro	ck 🔻 Mode: 🛛	ive_Assist 👻		
ettaControlManual Classic Rock	- Manual Ro	Sequencer Mode		RCS Classic Ro	ck 🖌 Moder 🛛	Manual 🚽		

After you have created the Inputs, click the "Output" tab to continue.

Add the outputs by again clicking the plus symbol on the right hand side of the configuration window. Here we can enable or disable a command, as well as give it a name, Task, etc.

By default all new outputs will be enabled.

Name the output using the same naming convention you have been using. Now select a task. Again, the list of tasks is extensive and offers many options. If you are unsure please contact RCS technical support to discuss the options.

For our setup we are going to use "PlayDevice.Play" and "PlayDevice.Stop". These tasks are used to tell Zetta to trigger the associated GPO when playback is started and another when it stops, thus turning the control surface channel "On" and "Off".

Under "Settings", select the audio device you would like to map this command to. In our setup it is the first three audio channels of the WheatNet-IP PC Driver.

In the "OptoEvent" drop-down select the GPOs you created earlier in the setup process. This is again where the naming helps you find the GPOs needed in a large system. We used GPO 1-6. Assigning GPO #1 for playback of device 1, and GPO #2 for stop. Following that pattern for the remaining two devices.

					oyatem					
ta*										1
Audio Fo	ormat Vo	ice Track and Quick Re	cord Scł	eduled Maintenance	Automatic Back	ups On Demand Re	cordings	Locations	Content I	Íngest
Genera	al GSe	lector® Wa	ancasting	Billboard	Other Audio	Audio Processing	Commar	nd Mappings	Auto I	.oad
pping	GPIO DEMO								- i - i	1 2
			Na	me		Comment				
Ŧ	Mappin Description	ng GPIO DEM	0							
nput	Assigned Co Output	mputer: ZETTA_DEMC	Comput	er GPIO Default		[a. 5		•	+	7
napled	Zatta 1 On	Task	Settings	ZETTA DEMO RIN	Davica - WNIR Output					
		Disconcises Disco		Ce: IZELIA_DENO Flay			5 #1 1	_		
	Zetta 1 Off	PlayDevice.Play	Output Devi	TETTA DEMO Play	Device - WNIP Output	WheatNet UIO #1 [GPC)#1]	•		
	Zetta 1 Off Zetta 2 On	PlayDevice.Play PlayDevice.Stop	Output Devi Output Devi Output Devi	ce: ZETTA_DEMO Play	Device - WNIP Output	WheatNet UIO #1 [GPC	D #1] D #2]	•		
	Zetta 1 Off Zetta 2 On Zetta 2 Off	PlayDevice.Play PlayDevice.Stop PlayDevice.Play	Output Devi Output Devi Output Devi Output Devi	ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play	Device - WNIP Output Device - WNIP Output Device - WNIP Output	WheatNet UIO #1 [GPC WheatNet UIO #2 [GPC WheatNet UIO #3 [GPC	D #1] D #2] D #3]	• • •		
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	Zetta 1 Off Zetta 2 On Zetta 2 Off Zetta 3 On Zetta 3 Off	PlayDevice.Play PlayDevice.Stop PlayDevice.Play PlayDevice.Stop PlayDevice.Play PlayDevice.Stop	Output Devi	ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play	Device - WNIP Output Device - WNIP Output Device - WNIP Output Device - WNIP Output Device - WNIP Output	WheatNet UIO #1 [GPC WheatNet UIO #2 [GPC WheatNet UIO #3 [GPC WheatNet UIO #4 [GPC WheatNet UIO #5 [GPC WheatNet UIO #6 [GPC	2 #1] 2 #2] 2 #3] 2 #4] 2 #5] 2 #6]	• • • •		
	Zetta 1 Off Zetta 2 On Zetta 2 Off Zetta 3 On Zetta 3 Off Zetta 4 On	PlayDevice.Play PlayDevice.Stop PlayDevice.Play PlayDevice.Play PlayDevice.Play PlayDevice.Stop PlayDevice.Stop PlayDevice.Play	Output Devi	ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play ce: ZETTA_DEMO Play	Device - WNIP Output Device - WNIP Output	WheatNet UIO #1 [GP(WheatNet UIO #2 [GP(WheatNet UIO #3 [GP(WheatNet UIO #4 [GP(WheatNet UIO #5 [GP(WheatNet UIO #5 [GP(WheatNet UIO #7 [GP(2 #1] 2 #2] 2 #3] 2 #4] 2 #5] 2 #5] 2 #6] 2 #7]	• • • •		
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Exit the screen saving your configuration.

Logic Configuration in WheatNet-IP Navigator

Now that we've got Zetta sending and receiving start and stop signals, all we need to do is associate those signals with the "Remote On", "Remote Off", and "Machine Start" functions of our WheatNet-IP sources.

Let's go back to the sources tab in WheatNet-IP Navigator, and look at our PC driver sources tab, select the Zetta 1 source, and click "Edit." Selecting the "LIO Info" tab will get us to this window:

	Blade	Wire	Invert	Direction	Function		
1							
2							
3						_	
4							Add
5						_	MUU
6						_	Edit
7						_	
8						_	Delete
9						_	
10							
11							
12							

This screen shows all logic signals currently associated with the Zetta 1 source. Currently there aren't any; we need to add two functions. Begin by clicking "Add."

The "Add" button will be greyed out if the signal is connected anywhere in the system. This is indicated in the lower left of the Edit dialog box. It the signal is not connected you will see "Signal is not connected". If the signal is connected you will see "Signal is connected". If it is the latter, you will need to go to the crosspoint and disconnect that source from any destinations. You will want to make a note of what destinations may be using this source. This will allow you to re-establish those connections once you are done. Remember during the Zetta configuration we said make a note of what GPI and GPO you assigned? This is where you will need it.

We've selected SLIO 1 on the right side of the window, we'll set the direction to "Input" since we're receiving this signal from Zetta, and we'll select "Remote On" as the function because SLIO1 is the start signal. Click Apply.

That takes care of the start, now for the stop. We'll select SLIO 2, Direction Input, and function "Remote Off". Click Apply.

Now let's finish up by selecting SLIO 9, Direction Output, and function name "Machine Start". Click Apply.

B	lade	Wire	Invert	Direction	Function	
1	Zetta	Soft LIO 1	No	Input	Remote On	
2	Zetta	Soft LIO 2	No	Input	Remote Off	
3	Zetta	Soft LIO 9	No	Output	Machine Start	
4						
5						Add
5						Edit
7						
в						Delete
9						
10						
11						
12						

Looks good. Let's click "Close" and have a review of what we've set up.

That is indeed what we wanted to set up: Soft LIO 1 triggers a Remote ON, and Soft LIO 2 triggers a Remote Off. We can click "Finish," which will bring us back to the sources window; we can then proceed to set up the logic for the other two automation sources.

These WheatNet-IP settings take effect immediately; there is no need to restart anything. You can shut down Navigator when you're done, too, since it doesn't take part in these logic actions once they're set up.

To confirm everything is correct, click the LIO Info tab in Navigator. This will give you a look at the entire SLIO configuration at one glance. Once you have confirmed everything is correct you should now be able to assign your three sources to faders on your control surface, run the automation, and watch the faders switch ON and OFF as the three players play their various materials. You will want to also test the remote start while you're at it.

Done!

Troubleshooting

Having trouble? Here's a list of things to check.

Have you changed the IP address of the Gigabit NIC used for the PC driver since you installed the PC driver software? You may need to restart the PC.

Are you receiving a message when installing the PC driver that says "No valid network adapter found?" Make sure you have the NIC connected to something – preferably a switch – before starting the installation process.

Is your audio stuttering? Make sure you have installed Windows 7 Service Pack 1. Note that Windows Update will not automatically install this service pack!

Are you unable to assign logic to a source because the "Add" button in the LIO dialogue is grayed out? Check for a message in the lower left corner of the window that says "Signal is connected." If you see it, you need to disconnect that source from any outputs or console faders before you'll be able to make any logic changes.

If you are having connectivity issues it could be one of the following. Please try the steps below to see if the problem is

corrected.

Metric

Click the "Advanced" button. On the "IP Settings" tab, ensure that "Automatic metric" is unchecked, and enter a metric of 5. Click OK, OK, and OK.

dvanced TCP/IP Set	tings		?			
IP Settings DNS	VINS					
IP addresses						
IP address		Subnet mask				
192.168.87.199		255.255.255.0				
	Add	Edit	Remove			
Default gateways:						
Gateway	Gateway Metric					
	Add	Edit	Remove			
Automatic metri	c					
Interface metric:	5					
		ОК	Cancel			

Binding Order

Setting the proper binding order ensures that the WheatNet-IP driver finds the correct adapter each time it starts. To set the binding order, navigate back to the network and sharing center. Click "Change adapter settings," then tap the "Alt" key, and select Advanced -> Advanced Settings from the menu that appears.

If the adapter you're using for WheatNet-IP networking is not at the top of the list in the upper box, move it there using the arrow tools to the right. Click OK all the way out to the desktop, then restart the PC to activate the new network settings.

Advanced Settings	×
Adapters and Bindings Provider Order	
Connections are listed in the order in which they are accessed by network services.	
Connections:	
- <mark>Gigabit NIC</mark> 	t
Bindings for Gigabit NIC.	
✓ ▲ Internet Protocol Version 6 (TCP/IPv6)	
Internet Protocol Version 4 (TCP/IPv4)	1
Client for Microsoft Networks	
Internet Protocol Version 8 (1 CP/IPv6)	
	Jancel

Need help with something not listed here? Contact your Wheatstone technical support representative and/or your RCS technical support engineer.

