

# NMOS - Out-of-band (OOB)

OOB stands for out-of-band, the control happening out of the media streaming network interfaces NIC 1 and NIC 2 of a RAV.IO module.

NMOS OOB allows control of RAV.IO modules hosted by a PRODIGY via the management port (MGMT) of the device.

Supported services:

- IS-04 Discovery & Registration (version 1.3)
- IS-05 Device Connection Management (version 1.1)

The configuration is set up in globcon, to connect it requires a:

- registry address (Server IP Address)
- port (Server Port)



### NOTE

It works even if the registry is not existent (place holder address), so that NMOS information can be accessed via OOB anyway (usecase : VSM NMOS gadget).

## Setup - globcon

- 1. Open globcon and navigate to the tab ,Settings-Licenses'.
- 2. Services NMOS- click 'Configure' to open the configuration window.

S 🗇 SC ? Home Input DSP	Routing Output Sync	Groups Snapshot Loud	ness Settings	SHOW ID: 1 - PRODIGY.MP 🌉
General LTC Generators MIDI Mor	itoring EARS MADI Re	dundancy GPIO Front Par	nel MirrorMode Slots	Licenses Global View
	System License	UNLIMITED		
DSP Plugins			Mix	& Sum
Flex Channels 1-8 9-16 17-24 25-32		Ma	atMix 16x4	
FIR Equalizers 1-3 9-16 17-24 25-32		Ma	atMix 8x8 1-2	
IIR Equalizers 1-3 9-16 17-24 25-32		Su	ım Busses 14	
Delays 1-3 9-16 17-24 25-32				
Dynamics 1-8 9-16 17-24 25-32				
AutoMix ACTIVE				
Tools			Sei	rvices
Installed		Installe	d Active Running	
Loudness Metering		globcon Bridge 🛛 🔵		
		Ember+ 🔵		
				Configure Interfaces
		Automator 🥥		
		SNMP		Configure
	ſ	Hama		
		NMOS 🔵		Configure



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		NMOS Server Status:		NMOS Clients: IP Address	Port obal View	
	Flex Channels 1 FiR Equalizers 1 IIR Equalizers 1 Delays 1 Dynamics 1 AutoMix Actor	Server IP Address: Server Port:		Kein Inhalt in Tabelle	6 <b>7</b> 3 6 <b>7</b> 3 24 253	
	Loudness Meteri				CLOSE	

3. Enter IP address (Server IP Address) and port (Server Port) of the registry.

NOTE

The current NMOS implementation does not offer NO DNS-SD, mDNS or P2P mode - they are very rarely used anyway.

**4.** Click the check box in the collumn 'Active' to start the service. You will be prompted to use the current configuration or to edit it first.

Litt Educations				Mathix 0x0			
IIR Equalizers			MMOS Configuration				
Delays							
Dynamics			PRODIGY NMOS Service				
AutoMix				$\smile$			
	1	Tools	NMOS needs a valid configuration		Se	rvices	
Installed			Use the current Edit configuration	Schließen	nning		

**5.** When successfully connected to a registry, the led 'NMOS Server Status' will light solid green.

	0.0	NMOS Config	guration		
8 🗆 sc 🤅	NMOS Server Status;		NMOS Clients:		): 1 - PRODIGY.MP 🌉
General	Hinoo certer olulus.		IP Address	Port	Global View
-			100.88.0.1	3210	
	Current Server IP	192.168.1.29			
D	Current Server Port	8010			
Flex Channels					5 7.8
FIR Equalizers 1-8	Server IP Address:  192.16	8.1.29			5 7-3
IIR Equalizers	Server Port: 8010				24 25-32
Delays 1-8	CAN	CEL SAVE			
Dynamics 1-8					



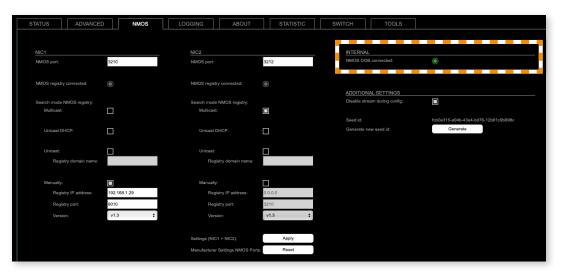
#### **NMOS** clients

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8 🖯	SC (Genera	?	NMOS Server Status:			NMOS Clier			1 - PRODIGY.MP
	Genera						IP Address	Port	
						100.88.0.1		3210	
			Current Server IP		192.168.1.29				
		D	Current Server Port		8010				
	Flex Channels								73
	FIR Equalizers		Server IP Address:	192.168.1	.29	• I			
	IIR Equalizers		Server Port:	8010					25-32
	Delays			CANCE	L SAVE				
	Dynamics	1-8				<u> </u>			

In the NMOS client array on the right there is the list of connected RAV.IOs. Today they are represented by their internal IPs (100.88.0.{1,5,9,13,17, 21} for slots {1,2,3,4,5,6}) but this will change to a more user friendly indication eventually.

You can access the NMOS infos at http://<prodigy IP>:3219/ where the browser should give you the "x-nmos/" text, you can list devices (RAV.IOs) at http://<prodigy IP>:3219/x-nmos/node/v1.3/devices

#### Setup - RAV.IO



The status of the internal connection is displayed in the tab 'NMOS' of the browser based user interface (http://<IPADDRESS RAV.IO>



## ΝΟΤΕ

NMOS Out-of-band requires a RAV.IO with software version > 1.10.