

User Manual for Squeeze2upnp Bridge (Software Version) for enabling playing Roon on NW-T, S-3 and S-5 Network Players

Squeeze2upnp Bridge (Software Version)

This program (squeeze2upnp – a.k.a the bridge) turns UPnP/DLNA players into squeezeboxes, so they can be seen by Roon as regular Squeezebox devices. It automatically scans local network for UPnP players and creates an instance of a modified Squeezelite for each one found. Pass-through mode is the default mode of UPnPBridge. In this mode, the bridge simply forwards the audio signal received from Roon to the UPnP player, i.e. the audio remains in its original quality.

The UPnPBridge-1.27.0.zip file, which is the latest version at the moment, can be downloaded from the following link: <u>https://sourceforge.net/projects/lms-to-upnp/</u>

UPnPBridge can run on any computer running Windows, OSX, or Linux x86/64, ARM and OSX. There is also a FreeBSD x86 build. Linux ppc and sparc version are available as well.

The installation steps are as follow:

1.1. In the Roon app installed on a Smartphone/Tablet/PC go to Settings > Setup and enable "Squeezebox Support"

<	Settings NUC8-I7		
General	Setup		
Storage	Configure Roon OS devices		Configure
Services	Fachle Structure and		
Setup	Enable Squeezebox Support		Tes
Play Actions	Core Name	NUC8-I7	
Library	Theme	Light	~
Audio	Hide Mouse Pointer Be careful, you won't be able to see the mouse pointer after turning this on. This feature is meant t	for touchscreens.	No No
Displays	Enable On-Screen Keyboard Input fields can automatically bring up the on-screen Windows keyboard. This feature is meant for	touchscreens.	No No
Extensions	Enable Roon Radio Notifications 30 seconds before the next track starts, Roon Radio will let you know what's coming up.		Yes
Account	Memory for Photos/Artwork Low values slow down cover display, high values may cause instability	256 MB	*
About Keyboard	Clear Image Cache Erases Roon's cache on this device. This requires a restart to take effect.		Clear Cache
Shortcuts	HQPlayer HQPlayer is an upsampling multichannel audio player for Windows, Linux, and OS X		Add HQPlayer
	To purchase HQPlayer or learn more, here		
Help Translate Roon!	Subnet for Linn Streaming	192.168.2	.0 🗸
English 🗸			
	Select an Audio Zone		

1.2. Turn on your UPnP/DLNA device(s) like NW-T, S-3, S-5.

- 1.3. Put the UPnPBridge-1.27.0.zip file on a LOCAL disk of the NAS, for example Disk (C:), where you have read/write access and extract it. After extraction we want to have the following path: C:\UPnPBridge-1.27.0
- 1.4. Open the Command Prompt (CMD) on the NAS. You can easily open the Command Prompt by clicking Start and/or Search box then typing "cmd".

Aut	CAD 2012 We 20 Diddispager Farel S Data Bar	avon. Adv	F Scanner V		DriveBool(E)
Deut	All Apps Documents Web More	e 🕶			۶२ …
/Adiolog	Best match				
400	Command Prompt App			er.	
XIMOSI	Apps			Command Prompt	
	Atmel Studio 6.0 Command Prompt	>		Арр	
N	Atmel Studio 7.0 Command Prompt	>			
	Settings		🗂 Open		
Nero	Replace Command Prompt with Windows PowerShell in the Win + X	>	Run as admin	nistrator	
	Search the web		Den file loc	Start	
Aul C		>	⊼6 Unpin from 9	ar	
-	A	•	s 🐐 🗎 🐱	() <u>n</u> 💀 ()	<u>•</u>

 1.5. In the command line write the command "cd.." and press "Enter" key. Repeat this several times, until the root of the Hard Disk (C:) has been reached: C:\Users\Gerhard>cd..

```
C:\Users>cd..
C:\ >
```

- 1.6. Navigate to the "Bin" folder inside of "UPnPBridge-1.27.0" folder using the same command: C:\>cd UPnPBridge-1.27.0\Bin
 - C:\UPnPBridge-1.27.0\Bin>

1.7. Choose the correct file for your OS (Windows, Mac, Linux) and CPU and launch it on the command line, and wait 30s till it exits. Inside of "Bin" folder there are the necessary files for different operating systems Windows, OSX, or Linux. For Windows the command line looks like this: C:\UPnPBridge-1.27.0\Bin>squeeze2upnp-win.exe -i config.xml

This will create a config.xml file inside of the "Bin" folder. All steps and used commands in Command Prompt about creating the config file can be seen on the next picture.

Note: The procedure of creating a config file should be repeated every time a new player has been added to the network.



1.8. By using the Notepad in Windows different parameters in the config file config.xml must be customized, as it is shown on the next picture. After all the changes has been made, don't forget to Save the config file before exit.

config.xml - Notepad

– 🗆 🗙

File Edit Format View Help <?xml version="1.0"?> <squeeze2upnp> <common> <streambuf size>524288</streambuf size> <output size>4194304</output size> <stream_length>-3</stream_length> <enabled>1</enabled> <remove_timeout>120</remove_timeout> <codecs>aac,ogg,ops,flc,alc,aif,pcm,mp3</codecs> <mode>thru</mode> <raw_audio_format>raw,wav,aif</raw_audio_format> <sample_rate>192000</sample_rate> 🔫 <L24_format>1</L24_format> <flac_header>1</flac_header> <roon mode>1</roon mode> < <forced_mimetypes></forced_mimetypes> <seek_after_pause>0</seek_after_pause> <send_icy>1</send_icy> <volume_on_play>-1</volume_on_play> < <volume_feedback>1</volume_feedback> <send_metadata>1</send_metadata> <send_coverart>1</send_coverart> <max_volume>100</max_volume> <accept_nexturi>1</accept_nexturi> <auto_play>0</auto_play> <server>?</server> <resample options></resample options> </common> <upnp_socket>?</upnp_socket> <slimproto log>info</slimproto log> <slimmain_log>warn</slimmain_log> <stream_log>warn</stream_log> <output_log>info</output_log> <decode_log>warn</decode_log> <main_log>info</main_log> <upre><upnp_log>info</upnp_log> <util_log>warn</util_log> <log_limit>-1</log_limit> <device> <udn>uuid:5F9EC1B3-FF59-19BB-8530-0011F6A0480A</udn> <name>ayon S-5</name> << <friendly_name>ayon S-5</friendly_name> <mac>bb:bb:f6:a0:48:0a</mac> <enabled>1</enabled> </device> <device> <udn>uuid:5F9EC1B3-FF59-19BB-8530-0011F683AC6F</udn> <name>ayon S-3</name> << <friendly_name>ayon S-3</friendly_name> <mac>bb:bb:f6:83:ac:6f</mac> <enabled>1</enabled> </device> <device> <udn>uuid:e11b4f1f-51a5-44a8-9253-a0a4baf5588a</udn> <name>NUC8-i7</name> <friendly name>NUC8-i7</friendly name> <mac>bb:bb:df:1e:08:e8</mac> <enabled>1</enabled> </device> </squeeze2upnp>

Ln 1, Col 1

UTF-8

- 1.8.1. <sample_rate>192000</sample_rate> which is the maximum supported sample rate
- 1.8.2. <roon_mode>1</roon_mode> which activates the UPnP/DLNA players as regular Squeezebox devices under Roon interface.
- 1.8.3. <volume_on_play>-1</volume_on_play>
 which disables the digital volume control of Roon.
 Use only the S-5 electric-analog volume control system by Remote
 Control or directly by the S-5 volume rotary knob.

Tracks Credits Versions 0	CLASSICAL OPERA 🖉 +	Construction
		(II) Al Casey, Arnett Cobb, Milt Buckner, Michael Silva, Roland Lobligeols
All tracks performed Jul 2012 - Dez 2012, To Conducted by Glanandrea Noseda Macbeth, opera 1847	rino, Teatro Regio.	Digital volume control by Roon is deactivated (I) PAUSE ALL ZONES
	If You Ain't K Al Casey, Arnett Cobb, Milt Buckner, Michael Silv	va, Roland L Queue S-5 Squeez2upnp 100
		and a second

 1.9. Launch the squeeze2upnp-win.exe file again without any flags and now your devices should appear in Roon app: C:\UPnPBridge-1.27.0\Bin>squeeze2upnp-win.exe 1.10. Make a shortcut of the file squeeze2upnp-win.exe and place it in **Autostart** folder of Windows. So, a Command Prompt window, which enables the UPnP Bridge, will automatically start with Windows. If Windows Firewall pop-up windows appears, please authorize the Connection. If you want to stop the UPnP Bridge, just close the Command Prompt window. The location of files config and squeeze2upnp-win.exe is shown on the picture below.

🔺 🖹 📋	🔏 Cut 👘 👘 💊	🖌 📑 👘 New ite	em • 📑 📪 o	pen 🕤 🕂 Sele	ct all	
× • • • ;	🚾 Copy path	🕨 🕂 📜 🖡 🐔 Easy ac	cess 🗸 🗹 📄 Ed	lit 🔡 Sele	ct none	
to Quick Copy Paste	Paste shortcut to - to	te Rename New folder	Properties	story 💾 Inve	rt selection	
Clipboard	Organise	New	Open	2	elect	
→ × ♠ 🔜 > Thi	s PC → OSDisk (C:) → UPnPBridge-1.27.	0. ≽ Bin		~	7	O Search Bin
	^	The second se				
Ouick access	Name	Date modified	Туре	Size		
Desktop 🖋	cc32160mt.dll	29/08/2014 15:55	Application exten	1,030 KB		
Downloads #	🔮 config.xml	06/05/2020 07:29	XML Document	2 KB		
Downloads x	libeay32.dll	27/05/2019 15:50	Application exten	1,342 KB		
Documents 🖈	libfaad2.dll	08/05/2015 15:07	Application exten	238 KB		
E Pictures 📌	libFLAC.dll	08/05/2015 15:07	Application exten	378 KB		
Bin	libmad-0.dll	08/05/2015 15:07	Application exten	136 KB		
DrivePool (F:)	🗟 libogg.dll	08/01/2018 12:41	Application exten	60 KB		
Gerhard Playlists	libogg-0.dll	29/07/2019 12:58	Application exten	24 KB		
III SSU	🚳 libopus-0.dll	28/07/2019 12:30	Application exten	311 KB		
	🚳 libopusfile-0.dll	28/07/2019 12:30	Application exten	51 KB		
OneDrive	libsoxr.dll	08/05/2015 15:07	Application exten	109 KB		
This DC	libvorbis.dll	08/01/2018 12:41	Application exten	1,205 KB		
	libvorbisfile.dll	08/01/2018 12:41	Application exten	104 KB		
3D Objects	pthreadBC2.dll	27/09/2014 00:36	Application exten	31 KB		
Desktop	squeeze2upnp-aarch64	03/05/2020 17:43	File	472 KB		
Documents	squeeze2upnp-aarch64-static	03/05/2020 17:43	File	3,495 KB		
Downloads	squeeze2upnp-armv5te	03/05/2020 17:43	File	500 KB		
Music	📄 squeeze2upnp-armv5te-static	03/05/2020 17:43	File	3,511 KB		
Pictures	squeeze2upnp-armv6hf	03/05/2020 17:43	File	452 KB		
Videos	squeeze2upnp-armv6hf-static	03/05/2020 17:43	File	3,324 KB		
videos	squeeze2upnp-bsd-x64	03/05/2020 17:45	File	606 KB		
USDisk (C:)	📋 squeeze2upnp-bsd-x64-static	03/05/2020 17:45	File	4,628 KB		
DrivePool (F:)	squeeze2upnp-osx-multi	03/05/2020 17:36	File	791 KB		
Network	squeeze2upnp-osx-multi-static	03/05/2020 17:36	File	1,805 KB		
	squeeze2upnp-ppc	03/05/2020 17:44	File	521 KB		
	squeeze2upnp-ppc-static	03/05/2020 17:44	File	3,939 KB		
	squeeze2upnp-sparc	03/05/2020 17:43	File	515 KB		
	squeeze2upnp-sparc-static	03/05/2020 17:43	File	3,708 KB		
	📧 squeeze2upnp-win.exe 🦯	03/05/2020 17:44	Application	787 KB		
	squeeze2upnp-x86	03/05/2020 17:44	File	627 KB		
	squeeze2upnp-x86-64	03/05/2020 17:44	File	617 KB		
	squeeze2upnp-x86-64-static	03/05/2020 17:44	File	5,519 KB		
	squeeze2upnp-x86-static	03/05/2020 17:44	File	4,040 KB		
	A 1 32 III					

34 items

1.11. Go to **Settings > Audio** of Roon to view your available outputs (zones). A 'SqueezeLite' devices should show up in the 'Squeezebox' section, which corresponds to the UPnP devices available in the network. In our case we have S-5 and S-3, we rename them respectively so.

<	Settings NUC8-17	R
General	Connected to Core These devices are connected to your Core directly.	C
Storage Services	System Output Audio will play out the default device.	Enable
Setup Play Actions	JRiver Media Center 26	
Library		
Audio	IOOON IPad von Gerhard-2 192, 192, 232 VOI 194, 1	cl
Displays Backups Extensions	Apple iPad Audio will play out the default device.	
Account	€: Squeezebox	
About Keyboard Shortcuts	Device Info SqueezeLite via Squeezebox Streaming, 192.168.2.142 Via Squeezebox Streaming, 192.168.2.142	O ₀
	Derive Info	
Help Translate Room	via Squeezebox Streaming, 192.168.2.142	
		J

1.12. Go to the Library, choose and play a song.

	See an	Philharmonics Agnes Obel						
		🕨 Play Now 👻 🖸	Focus C	on Similar	:	\heartsuit		
	3	Date Recorded Original 2008 - 2010 4 Oct 201	y Release 0	rd Re 201	leased 11	Added 30 Apr	2020	
	FLAC 44.164± 16bt the; 25m Dynamic Range +8	all the more remarkabl seemingly straightforwa for immediate appeal –	e given ard piar Ohel's c	how un 10/vocal leep sing	nderstati album t ging void	ed Philh that isn'i ce is love	armonics is as t. Combining a ely and her ear	a listen, a strong ear for a calm
		ALTERNATIVE SINGLESSONGWRITTER ALTERNA	IM/INDE	ROOK POIN	reack			
Tra	cks Credits Versions Q	ALTERNATIVE SIMERISONSWEPTER	174/19438	ROCK POP	ROCK	Play Picks		
Tra	cks Credits Versions Q			1:33	FO	Play Picks	Recommen	ided For You
Tra	cks Credits Versions Q Falling, Catching O	Alternity second attain	D D	1:33	₩CCK ► 1 ► 0 ► 0	Play Picks	Recomment	Ided For You 22 Nov 2005 **** Piece By Piece Katle Melua
Trai	cks Credits Versions Q Falling, Catching D Riverside > Brother Sparrow <		D D D	1:33 3:48 3:58	+0 +0	Play Picks	Recommen	Ided For You 22 Nov 2005 •••• Piece By Piece Katie Melua
Tra	cks Credits Versions Q Falling, Catching Riverside Brother Sparrow Just So 4		D 0 0	1.33 3.48 3.58 3.35	+0 +0 +0	Play Picks	Recommen	22 Nov 2005 Piece By Piece Katie Melua 16 Aug 2009 XX The xx
Tra	cks Credits Versions Q Falling, Catching Riverside Brother Sparrow Just So Beast		0 0 0	1:33 3:48 3:58 3:35 3:50	+0 +0 +0 +0 +0	Play Picks	Recomment Comment Set Mode v	22 Nov 2005 •••• Piece By Piece Katle Melua 16 Aug 2009 •••• XX The xx

1.13. From the Zones select S-5 Network Player

