Setup DXLog and LogHX for UDP communication

LogHX3 is a very good freeware logger software developed by **Alexei RX4HX**, designed as complete Ham Radio environment. **LogHX3** is available on this website <u>http://rx4hx.qrz.ru/</u>

This setup not mandatory for a contest can permit to add some **LogHX3** features to **DXLog** like contact details from <u>QRZ.com</u>, automatic log to <u>Club Log</u>, radio information's like frequency, band, mode, view the azimuth of contact on an azimuthal map, information's of specifics **LogHX3** statistics, the QSO logging in real time on the **LogHX3** alternative database, and so on.

The way to do this configuration, is to use the "**DXLog UDP broadcast**" features. This picture is an example of an implementation of some **LogHX3** extra features. **LogHX3** is connected to **DXLog** through the network protocol **UDP**



<u>DXLog Setup</u>: Not all types of UDP broadcast messages are mandatories. It depends of what LogHX features want to be used. Some of them are explained here but a control needs to be done to check if our goal is achieved.

- DXCluster Spots Broadcast Needs to send Spots on LogHX DXcluster Windows
- Radio data Broadcast Needs to interact and report radio information's on LogHX
- Direction UDP Broadcast Needs to interact with direction of contact
- QSO UDP Broadcast Needs to log QSO in LogHX database, Club Log, QRZ.com, ...
- Setup the **UDP broadcast parameters** with the Options|Network configuration panel. For this setup, the **UDP** port **12070** is chosen to interact with **LogHX**. (Note that up to three ports can be specified for each broadcast parameter and the default port **12060** could be used for this setup)

Network configuration	
Station ID: STN1_F8GHE	
UDP networking for multiple stations	
UDP network parameters	Live score UDP broadcast
IP address: 127.0.0.1 Port: 9888 Defa	ult IP address: 127.255.255 Port: 12070 Default
Start network server No spots via client/serv	Per DX cluster spots UDP broadcast
Network server parameters	IP address: 127.0.0.1 Port: 12060 12070 Default
Server IP: 127.0.0.1 Port: 9888	Radio data UDP broadcast
Connect as network client	IP address: 127.0.0.1 Port: 12060 12070 Default
Network client parameters	Direction UDP broadcast
Server: 127.0.0.1 Port: 9888	IP address: 127.0.0.1 Port: 12060 12070 Default
	QSO UDP broadcast
	IP address: 127.0.0.1 Port: 12060 12070 Default
Other parameters	UDP broadcast listener
Network timeout (sec): 120 Serial number server	IP address: 127.0.0.1 Port: 13064 Default
	K Cancel

- Enable broadcasting using the Options|Broadcast
 - o **Select** Radio information, Antenna direction and QSOs
 - Select Use N1MM QSO format
 - Enable the type of Callsign transmit Callsign on space or tab or
 Callsign when changed. With the second one choice, callsign is transmitted in real time to LogHX3 during keyboard typing

+ 🗸	Radio information
• 🗸	Antenna direction
• •	QSOs
, Ľ	Use N1MM QSO format
•	Callsign on space or tab
•	Receive broadcasts

NB. Don't confuse Options|Broadcast|Antenna with the Direction Options|Rotator configuration used for <u>PSTRotatorAz</u> or <u>EA4TX</u> rotator software's. This last option doesn't need "UDP broadcast setup". After the correct setup of the Options|Rotator configuration a CTRL+F12 for Long Path or ALT+F12 for Short Path send an UDP datagram to the selected Port in Rotator configuration with one of these two formats:

- EA4TX format: <EA4TX><BAND>xx</BAND><ANTENNA>x</ANTENNA><AZIMUTH>xxx</AZIMUTH></EA4 TX>

(*) <CALL>xxx</CALL> will be inserted from 2.5.42 for PSTRotator Tracking by Callsign

LogHX3 Setup: Follow these steps to setup LogHX3.

- Disable Radio1 and Radio2 Setup | Radio1 | none and Setup | Radio2 | none All radio's data (Commands and information's) come from UDP through DXLog-Radio connection (USB or other). A bad configuration at this level could generate conflicts.
- Setup Broadcast Data with Setup | General Setup | Broadcast Data

Setup LogHX							×
QSL status Ba	ackup LogCAT	Callbooks	Time life spots	Labels	RDA base	Language/Skin	Hot keys
General Defau	It Band Setup	Mode Setup	Digital setup	Color setu	up for country si	tatus LoTW/eG	SL/HRDLog
ADIF setup	IOTA	Libraries	Maps	E-mail	Bro	adcast Data	Rotors
UDP Broadcast							~
-Send (N1MM form <u>Type of data</u>	nat)	P address	Port		Receive	12070	0
🗌 Radio	127.0.0.	1	12060	••		Type of data	
Contact	127.0.0.1	1	12060	••	🗹 Radi		
Spots	127.0.0.	1	12060	12060		act (N1MM format)	
– Send (ADIF forma <u>Type of da</u>	t) <u>ta</u>	<u>IP address</u>	<u>Po</u>	<u>rt</u>	🗹 Spot	s (N1MM format)	
Contact	127.0.0.	1	2237	\$	Conta	act (ADIF format)	
L.	OK	Cancel					

In the Receive part of this windows:

- Configure the **Receive Port number** Set the same Port as the one chosen for DXLog (12070 for our example)
- Check Radio: For interactions between the radio and LogHX3 (Frequency... display)



• Check **Contact** For callsign exchange with the Windows | QSO Entry. This setup gives the opportunity to visualize the direction of contact on an Azimuthmap, to get more callsign information's from QRZ.com, to transmit call data to the Club Log website, to store calls to the **LogHX3** Database...

Radio1 (12-12-2022 20:13)		×								
No Radio: 7,0505	adio: 7,0505 Mode: CW [30] Band: (
[EU] SM: Sweden (Smaal: SP/LP: 25°/205°, 1200 km. WAZ:14/ITU:18/UTC:-1/Su	and _Scania) , 56,9°N 14,4°O n 08:33-15:22, 21:1	13 Loc.time								
Call (LoTW, eQSL, Hamlog	3)	a								
SM7IUN		🖃 🐴								
RSTR 599										
Name Bjorn	QTH Bjarred	i ja								
Via	WWLoc									
State	County									
ΙΟΤΑ										
25°/205°, 1200 km. 56,9% 14,4%	O 08:33-15:22, 21:13 L	.oc.time								

Windows|QSO Entry



The Windows | Azimuth map



The Utilities|Find...|Find call on QRZ.com to get data from QRZ.com

Log	: f8gl	he, Base: (C:\hamradio	LogHX\L	.og\loghx-	base_f8gh	ie.lhx2					\rightarrow
Ma	n prefix	: SM Cont.	EU WAZ:14	ITU : 18	Latitude : 56	, 85 Longitud	le : 14,35	Loca	l time (v	vinter): 21:35	Country name : Sweden (Sm	haal
-	₃gNun)ateQSC ⊽	Call	TimeQSO	Freq	BandADIF	Mode	QSLR	QSLS	Name	QTH	^
11		02-05-2021	HA1BF	19:15	7,0748	40M	FT8					
12		02-05-2021	DK7ZT	19:12	7,0752	40M	FT8					
13		02-05-2021	F5SBM	19:10	7,0757	40M	FT8					
14		02-05-2021	F5PI0	19:04	7,0753	40M	FT8					
15		02-05-2021	DC2TL	19:01	7,0751	40M	FT8			Markus	48249 Duelmen	
16		02-05-2021	E70E	18:59	7,0752	40M	FT8			ZDRAVKO	Avenija 105	
17		01-05-2021	OK2GU	21:14	7,0260	40M	CW					
18		01-05-2021	IK5ZWU	21:12	7,0255	40M	CW			WALTER	CHIANCIANO TERME (SL
19▶		12-12-2022	SM7IUN	20:33	7,0505	40M	CW			Bjorn	Bjarred	
>												
QSC	Nº 19	/ Total QSO:	19 Selected 0	QSOs 📃 🕻	Inselect	Find						A V
		-										

The Windows | Log Window view

The second secon	' ×
HRDlog.net QSO: Callsign=&Code=&ADJFData= <station_callsign:5>F8GHE <call:6>SM7IUN <qso_date:8>20221212 <time_on:6>203300 <freq:6>7.0505 <band:3>40M <mode:2>CW <rst_rcvd:3>599 <rst_sent:3>5 <operator:5>F8GHE <band_rx:3>40M <dxcc:3>284 <eor> QRZCOM QSO: <station_callsign:5>F8GHE <call:6>SM7IUN <qso_date:8>20221212 <time_on:6>203300 <freq:6>7.0505 <band:3>40M <mode:2>CW <rst_rcvd:3>599 <rst_sent:3>599 <operator:5>F8GHE <band_rx:3>40M <dxcc:3>284 <eor> HRDlog.net: Error add QSO - Unknown user QRZCOM: STATUS=AUTH&REASON=invalid api key &EXTENDED=</eor></dxcc:3></band_rx:3></operator:5></rst_sent:3></rst_rcvd:3></mode:2></band:3></freq:6></time_on:6></qso_date:8></call:6></station_callsign:5></eor></dxcc:3></band_rx:3></operator:5></rst_sent:3></rst_rcvd:3></mode:2></band:3></freq:6></time_on:6></qso_date:8></call:6></station_callsign:5>	99



o Check Spots To visualize Spots Entries on the Windows | DX-Cluster | Spots

Clust	er (f	ilte	er of	ff)														X
Spots	Ala	rms	Te	Inet	Telnet 2	2 T	elnet 3	Fa	vori	ite Spots	An	nounce	Me	ssages				
All	136	1	.8	3.5	5	7	10.1	1	4	18	21	24.9	28	50	VHF			
Sp	otter			Cou	ntry		DXCa			Freq	Bar	ndADIF		Mode		In	0	Δ
										0,0000								
	_			_	_		_			_		_						<u> </u>
<u> </u>																		~

The Windows | DX Cluster to view all the spots on the TAB [All]

NB. <u>Hercules Utility v3.2.8</u> from <u>HW-Group</u> could be very useful for UDP troubleshooting