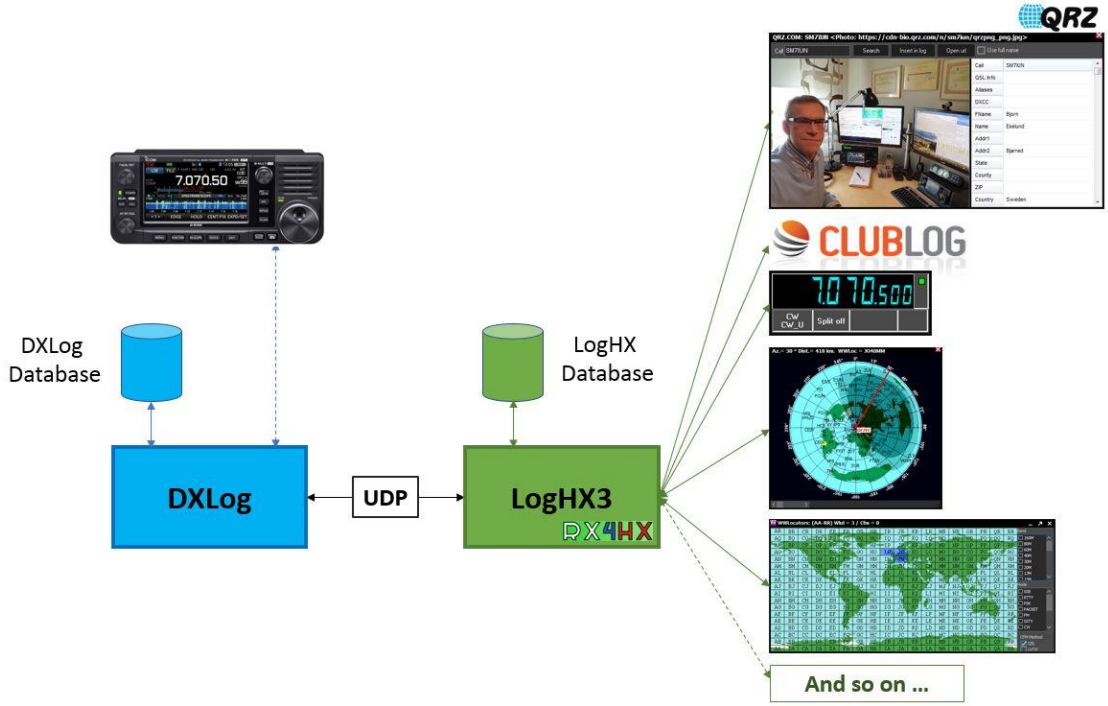
Setup DXLog and LogHX for UDP communication

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

This setup not mandatory for a contest can permit to add some **LogHX3** features to **DXLog** like contact details from QRZ.com, automatic log to Club Log, 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.

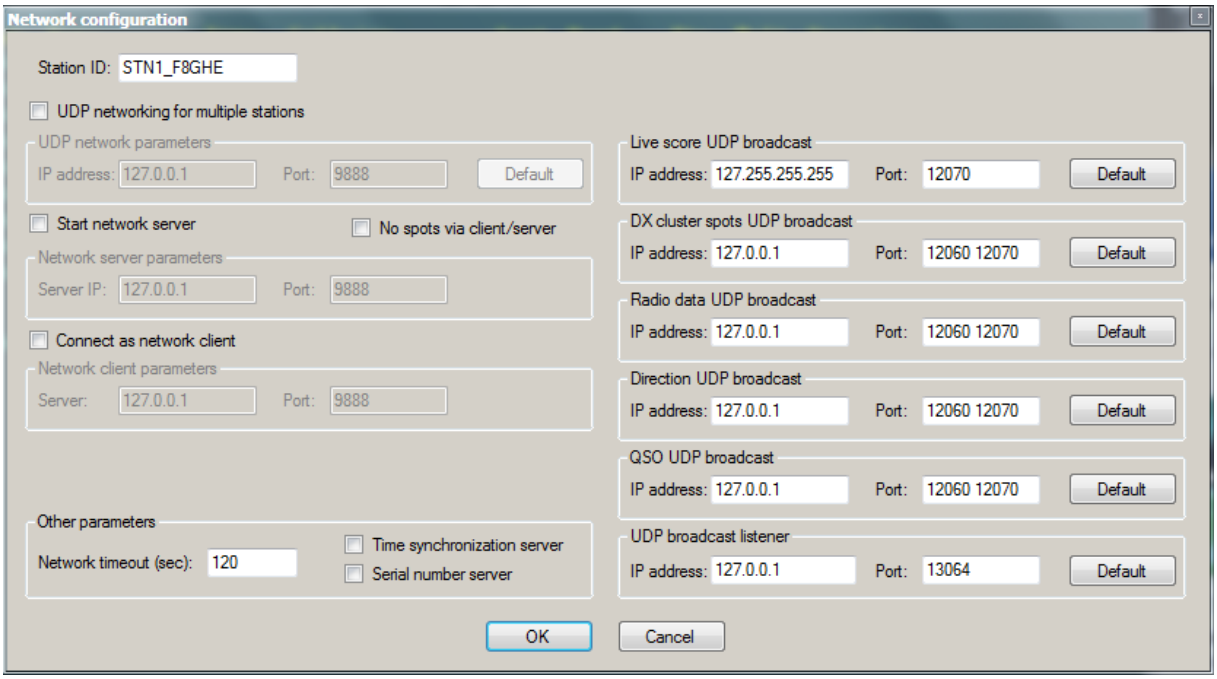
The way to do this configuration, is to use the "**DXLog UDP broadcast"** features. This picture is an example of an implementation of some **LogHX3** extra features. **LogHX3** is connected to **DXLog** through the network protocol **UDP**



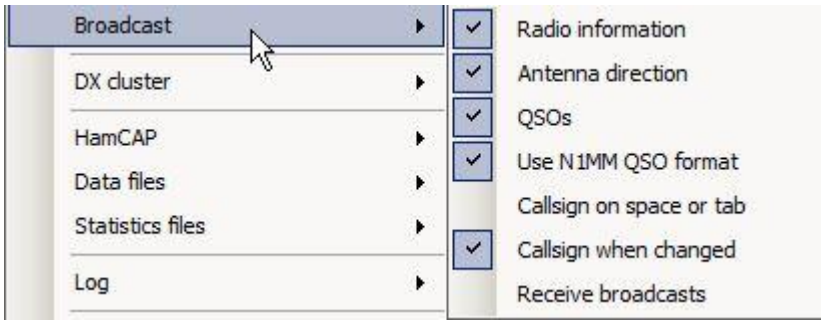
<u>DXLog Setup</u>**:** Not all types of UDP broadcast messages are mandatories. It depends of what LogHX features want to be used. Some of them are explained here but a control needs to be done to check if our goal is achieved.

- **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)



- Enable **broadcasting** using the `Options|Broadcast`
  - 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



NB. Don't confuse `Options|Broadcast|Antenna` with the `Direction` `Options|Rotator configuration` used for PSTRotatorAz or EA4TX 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:

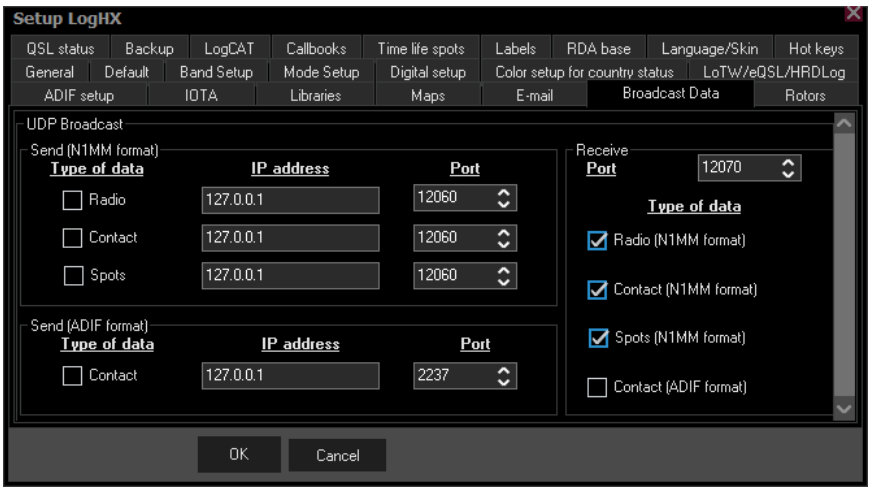
- **PSTRotator-Az format:** `<PST><AZIMUTH>xxx</AZIMUTH></PST>` **(*)**
- **EA4TX format:** `<EA4TX><BAND>xx</BAND><ANTENNA>x</ANTENNA><AZIMUTH>xxx</AZIMUTH></EA4TX>`

(*) `<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`



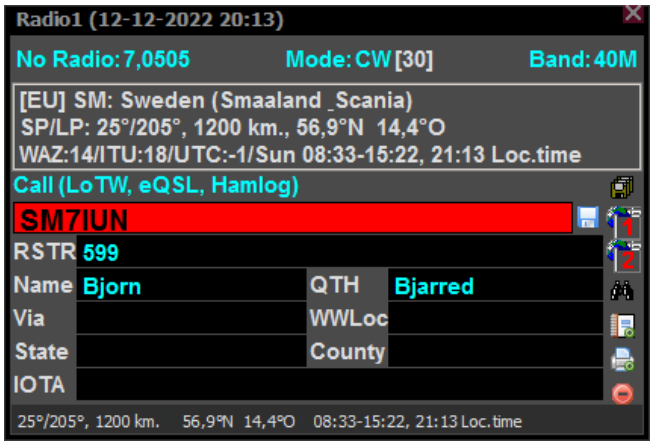
In the Receive part of this windows:

  - Configure the **`Receive Port number`** Set the same Port as the one chosen for DXLog **(12070** for our example**)**

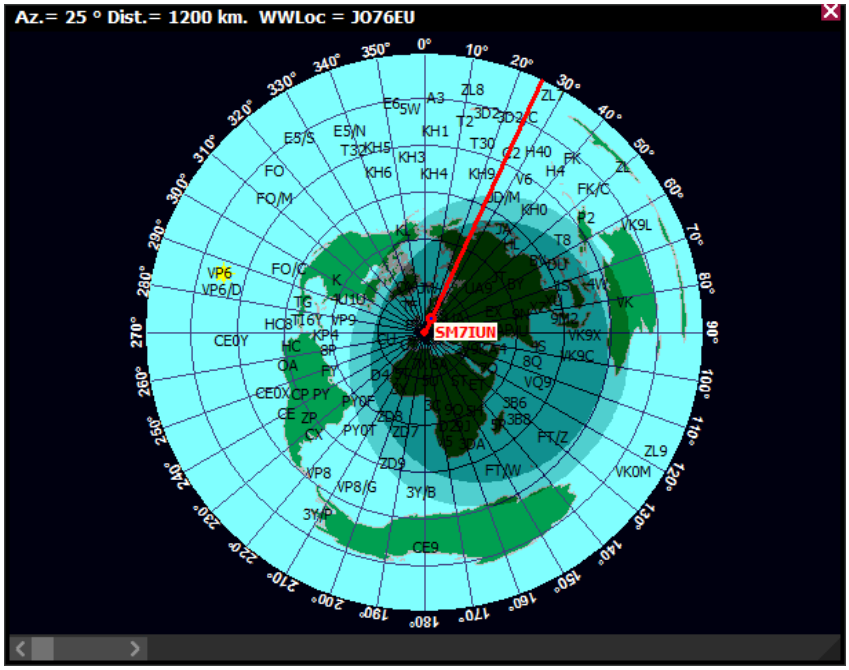
  - Check **`Radio`**: For interactions between the radio and **LogHX3** (Frequency... display)

`Windows|Freq from radio`

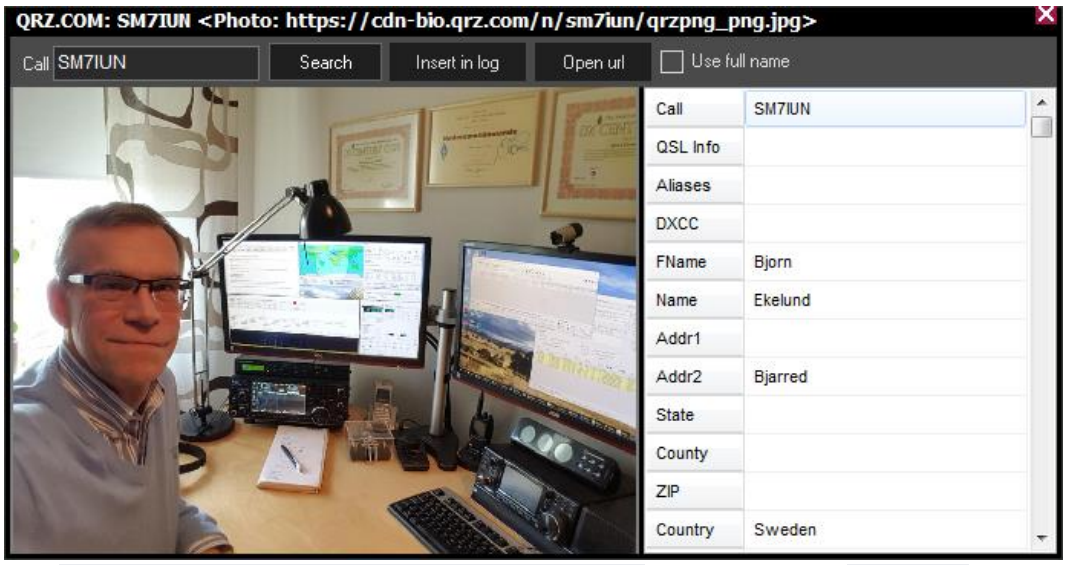
  - Check **`Contact`** For callsign exchange with the `Windows|QSO Entry`. This setup gives the opportunity to visualize the direction of contact on an Azimuth-map, to get more callsign information's from QRZ.com, to transmit call data to the Club Log website, to store calls to the **LogHX3** Database...



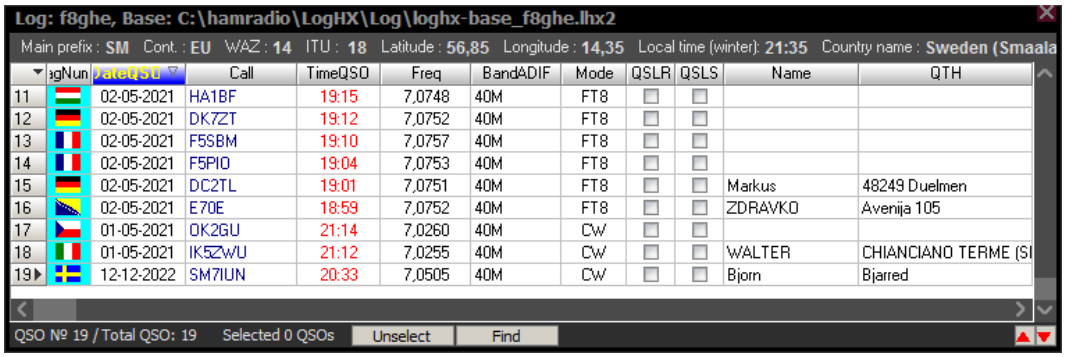
`Windows|QSO Entry`



The `Windows|Azimuth map`

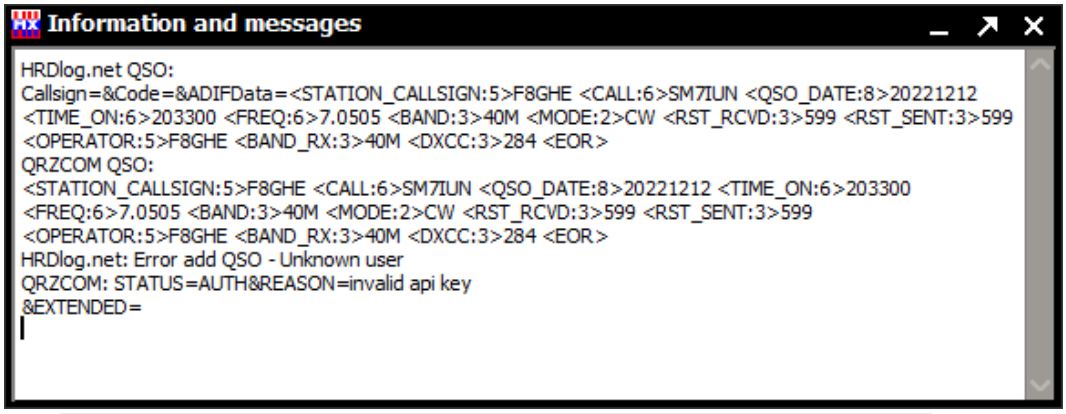


The `Utilities|Find…|Find call on QRZ.com` to get data from `QRZ.com`



	gNun	DateQSO	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	F5PIO	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 (SI
19		12-12-2022	SM7IUN	20:33	7,0505	40M	CW			Bjorn	Bjarred

The `Windows|Log Window` view



The `Setup|General setup|LoTW/eQSL/HRD Log|Show info Window` to visualize QSO data transfer to the Club Log website

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

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

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