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Log40M2

www.log4om.com



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INTRODUCTION

JT (Joe Taylor) based applications use a special UDP message protocol to share information with listeners. One of those messages is the currently decoded calls, another is the logged contact when you save a QSO in the JT program.

There are many others messages containing various information (Data) being shared by the various different software applications.

Once set up to read (Receive) messages via UDP, Log4OM searches for the 'QSO' message to be logged.

IMPORTANT NOTE:

When an application is sending a UDP message (not a broadcast/multicast message) as JTDX or WSJT-X, that message is 'Captured' by the first application that reads the UDP data from the exposed network, no other application will now see that message, its gone!

Once the message has been captured by the first application it is no longer available for other software to read, similar to putting a ten dollars bill on floor in a supermarket. The first person notices and collects the US\$10 leaving nothing for any other shopper in the supermarket to find!

Log4OM, Gridtracker, JTAlert and other applications that listen for a UDP message from JTAlert are competing to receive the message first. That means that sometimes JTAlert can get the message first, sometime GT, sometime Log4OM. This is not good behaviour because if Log4om 'Captures' a message that is of interest to JTAlert, then JTAlert will not receive the info. In the same way, if GRIDTRACKER 'Captures' a QSO message, Log4Om will receive the message and cannot log it.

That's why, when configuring multiple JT applications, ONLY ONE APPLICATION SHOULD BE CONFIGURED TO USE JT UDP MESSAGES, and this application should take care of REBROADCASTING the relevant information to other applications that are waiting for the information.

Configuration 1: Log4OM integrated with one JT application (WSJT/MSHV/JTDX) CASE 1: JT MESSAGE VIA UDP



JT APPLICATION		Inbound connection × UDP INBOUND Connection name JT
Settings ? X Ceneral Bado Audo Sequencing Tx Macros Reporting Frequencies Notifications Filters Sched, * Logging Send logged QSO ADIF data Recording to ALL.TXT Prompt me to log QSO Convert mode to RTTY Bistance to comments Distance to comments Distan	In this scenario Log4OM is the only UDP receiver, Log4OM receives the QSO directly using the JT UDP PROTOCOL that contains logged QSO data. Users should configure a direct WSJT/MSHV/JTDX UDP connection as shown, Log4OM will then receive the QSO's	Port 2237 Service type JT_MESSAGE Default answer on msg received UDP Int und parameters SAVE_NEW_QSO USE_EXTERNAL_DATA UPLOAD_QSO UPDATE_CQ_ITUZONE UPDATE_CQ_ITUZONE Preset config JTDX/WSJT ADIF WSJT/JTDX UDP ADIF from GT / JTAlert

Configuration 1: Log4OM integrated with one JT application (WSJT/MSHV/JTDX)

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Log40M CASE 1: ADIF MESSAGE Inbound connection JT APPLICATION UDP INBOUND Connection name INCOMING JT ADIF Pot 2234 ÷ Service type ADIF_MESSAGE ~ + Default answer on msg received UDP Inbound parameters 🗚 Settings ? × 1 - 6 Sequencing Tx Macros Reporting Radio Frequencies Notifications Filters Schedu 🕨 USE EXTERNAL DATA General Audio UPLOAD QSO Send logged OSO ADIF data Recording to ALL.TXT Logging UPDATE GRIDSQUARE Although not decoded messages Prompt me to log QSO TCP server: 127.0.0.1 UPDATE_CQ_ITUZONE Enable automatic logging of QSO decoded and debug messages TCP port: 52001 reccommended in this Convert mode to RTTY Enable sending to TCP se P dB reports to comments configuration, the user 3 items selected 2nd UDP server 127.0.0.1 Distance to comments Preset config WARNING 2333 UDP port: may want to use a specific Clear DX call and grid after logging JTDX/WSJT ADI WSJT/JTDX UDP Clear DX call and grid on exit Enable sending to secondary UDP server ADIF message to log SOURCE PORT HAS BEEN PRESET TO 2234. Please check if the Network Services application is sending data to this port Enable eQSL sending Enable PSK Reporter Spotting QSO's into Log4OM. Enable DXSummit Spotting In that case configure an Username: Password: ADIF INBOUND message QTH Nickname: Primary UDP Server into Log4OM listening on PLEASE NOTE: Accept UDP requests UDP Server: 127.0.0.1 port 2333 DO NOT ALSO CREATE A JT CONNECTION. If you create ٢ Notify on accepted UDP request UDP Server port number: 2237 Accepted UDP request restores window also a IT CONNECTION Enable sending logged QSO ADIF data Prevent spotting messages with the unconfirmed callsigns via UDP The Log4OM default port The QSO will be received twice by Log4OM, potentially Apply text filters to transmission of the UDP messages causing overhead (The QSO will not be logged due to

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duplicate keys check, but there wil be a lot of errors in

the program log)

should also be updated to 2333 instead of 2234

Configuration 2: Log4OM with JT software and another application (GRIDTRACKER or JTALERT)

In this situation, only one application should get the JT message, use the information and then relay the relevant data to other applications.

The simplest way is to have JTAlert or GridTracker, to receive JT UDP messages. JTAlert should then foward/relay the QSO data to Log4OM via ADIF MESSAGE



More options:

Once familiar with how UDP messages work it is possible to set up different configurations.

Example:

Enable a secondary UDP ADIF broadcast on JTDX, then put Log4OM reading the message using an ADIF INBOUND CONNECTION on port 2333 while you have JTAlert reading the JT PROTOCOL messages on port 2237

Enable cending to TCP cerver	Primary UDP Server		
2nd UDP server 127.0.0.1	UDP Server:	127.0.0.1	Accept UDP requests
✓ Enable sending to secondary UDP	UDP Server port number	2237	Notify on accepted UDP request Accepted UDP request restores window
+ K+	UDP Server port number	2237	Notify on accepted UDP requ Accepted UDP request restor

In this case, JTAlert should NOT send ADIF messages to Log4OM, because Log4OM will receive them twice (one from JTDX application and one from JTAlert ADIF message).

If Log4OM is configured to listen on port 2333 for ADIF messages from JTDX and JTAlert is sending ADIF messages to port 2341 then no program will received or act on the data sent.

127.0.0	0.1	IP Address 나		
2235	ADIF_MES	SAGE Port	1241	Control Port

BUT...

Other options can be explored, that may be extremely powerful but also create problems...

Both Log4OM and JTAlert are capable of 'listen and discard' a UDP message on port X and 'retransmit' the message to another listener (but only one, or the user will create another competition for the data on secondary broadcast) on a DIFFERENT PORT, Log4Om does this with the 'proxy connection' type.

Basically, it reads the UDP message on port X, uses it and resend the message to port Y, where another application is waiting the «JTDX/WSJT message».

This way, it is possible to create chains between applications, where every application is receiving a JT MESSAGE, uses it and then forward the message on another port to another listener.

So, if you configure:

JTDX to send messages on port 2237

	Primary UDP Server		
-	UDP Server:	127.0.0.1	Accept UDP requests
/	UDP Server port number:	2237	\$ Notify on accepted UDP request
			Accepted UDP request restores window

Log4OM to read messages from port 2237, and rebroadcast using proxy feature To port 2238, JT Alert can be configured to «listen» JTDX on port 2238 instead, and have a chain of applications working 'one to one' with JTDX as if they were the only ones. Obviously configuring a JT rebroadcast on JTALert to another port you can "connect" GRIDTRACKER or another application.

Inbound proxy	Inbound proxy connection					
UDP INBOUND	J PROAT					
Connection name JTDX						
Source address						
IP Address	Leave blank for any	Port	2237	•		
Destination address						
IP Address	127.0.0.1	Port	2238	-		
Internal relay to UDP inbound service						
Service name	JT_MESSAGE		(
UDP proxy parameters						
. 🛩 🗕 🗇						
SAVE_NEW	/_QSO					
USE_EXTERNAL_DATA						
UPLOAD_QSO						
UPDATE_C	Q_ITUZONE					
	4 items selected					

Last words.....

- These notes are correct at the time of writing (30/05/2023) however changes to external software like JT
 programs is outside the control of Log4OM and users should seek advice regarding such changes from the
 other software vendors, not from Log4OM.
- Log4OM does not take any responsibility for damage to a users PC or software while using Log4OM or implementing connections described herein.
- For further assistance use the Log4OM forum located here http://forum.log4om.com/

73 & GOOD DX FROM THE LOG4OM TEAM.....