# 2021: Connecting WSJT-X to N3FJP Field Day Contest Log
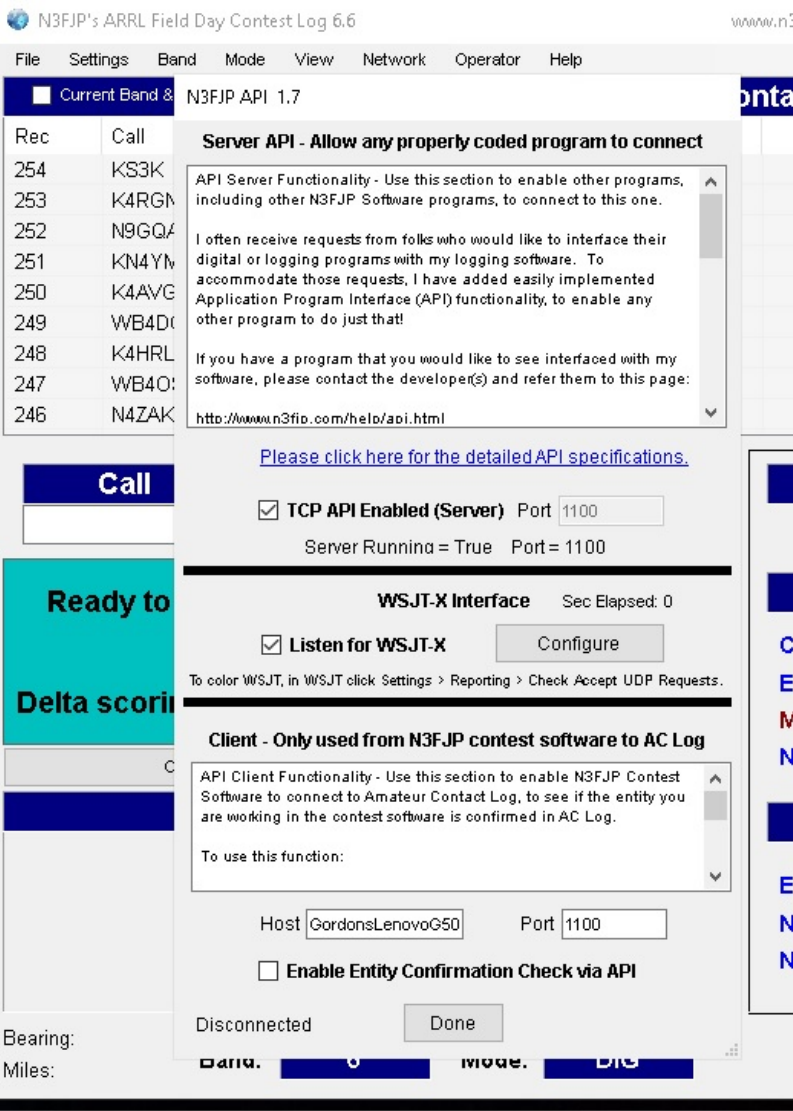
Update 6/10/2021 GLG

Thanks to a corrective tip from **Robert Hanson, the ARES DEC for Ventura County,** there is now a much simpler way to connect WSJT-X to N3FJP Field Day Contest Log and JTAlert is no longer necessary.   WSJT-X will now allow direct UDP packet connections to N3FJP.

Sections below that are no longer needed are marked out with a reddish highlighting.

| STEPS | Details, Comments |
|---|---|
| 1.  **BE CERTAIN THAT YOU HAVE N3FJP Field Day Contest Log 6.6 or higher.**   Version 6.5 did not seem to have this capability.   You can re-download the N3FJP Field Day Contest Log and it seems to properly install and my older icon on my desktop then brought up the newer version.<br><br>Configure N3FJP Field Day Contest log on each radio-associated computer to enable the TCP API Server and to respond to UDP requests.<br><br>Most important set of instructions on all of this are from N3FJP site:   http://www.n3fjp.com/help/digitalsetup.html | First thing to do within N3FJP:<br>("Configuring N3FJP Software" in the link to the left) is to ENABLE the TCP API Server on port 1100  (Settings > Application Program Interface).   (This is explained in the document linked to the left, under "Configuring the N3FJP Software.")<br><br>Version 6.6 of the Field Day Contest Log includes the API Verion 1.7 which has a new WSJT-X Interface section in the |

| | middle. **Click "Listen for WSJT-X" in this section.** |
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| | The "CONFIGURE" button is optional -- connection appears to work well without it.   One possible useful configuration is the "Dupes are digital mode specific" -- have not tested this yet. |
| | Do not enable the client side at the bottom end of that config page; you don't use that. |
| | We are not using N3FJP to do the rig interface, so we leave Settings > Rig Interface to NONE. |
| | Skip down to **JTAlertX by Laurie, VK3AMA** and follow those instructions. |

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| | N3FJP's ARRL Field Day Contest Log 6.6     www.n3f<br><br>File  Settings  Band  Mode  View  Network  Operator  Help<br><br>☐ Current Band &   N3FJP API 1.7     ontac<br><br>**Server API - Allow any properly coded program to connect**<br><br>API Server Functionality - Use this section to enable other programs, including other N3FJP Software programs, to connect to this one.<br><br>I often receive requests from folks who would like to interface their digital or logging programs with my logging software. To accommodate those requests, I have added easily implemented Application Program Interface (API) functionality, to enable any other program to do just that!<br><br>If you have a program that you would like to see interfaced with my software, please contact the developer(s) and refer them to this page:<br><br>http://www.n3fjp.com/help/api.html<br><br>Please click here for the detailed API specifications.<br><br>☑ TCP API Enabled (Server)  Port 1100<br>Server Running = True  Port = 1100<br><br>**WSJT-X Interface**   Sec Elapsed: 0<br>☑ Listen for WSJT-X  [ Configure ]<br>To color WSJT, in WSJT click Settings > Reporting > Check Accept UDP Requests.<br><br>**Client - Only used from N3FJP contest software to AC Log**<br><br>API Client Functionality - Use this section to enable N3FJP Contest Software to connect to Amateur Contact Log, to see if the entity you are working in the contest software is confirmed in AC Log.<br><br>To use this function:<br><br>Host GordonsLenovoG50   Port 1100<br><br>☐ Enable Entity Confirmation Check via API<br><br>Disconnected  [ Done ]<br><br>Rec 254 KS3K<br>253 K4RGN<br>252 N9GQA<br>251 KN4YN<br>250 K4AVG<br>249 WB4D0<br>248 K4HRL<br>247 WB4O!<br>246 N4ZAK<br><br>Call<br>Ready to<br>Delta scori<br>Bearing:<br>Miles: |
| | NOTE THIS IS AN UPDATED VERSIONwith the new section for WSJT-X Interface |
| 2. LOGGING SERVER Part One. One computer is going to be the "logging server" Other computers will connect to this computer for N3FJP purposes, by TCP.. Determine the NAME and IP Number of the "logging server"<br><br>(We usually make this a separate computer so that an operator is not | N3FJP Menu Item NETWORK: |

having to manipulate the keyboard and possibly make an error that would affect the server, but this is not required.)
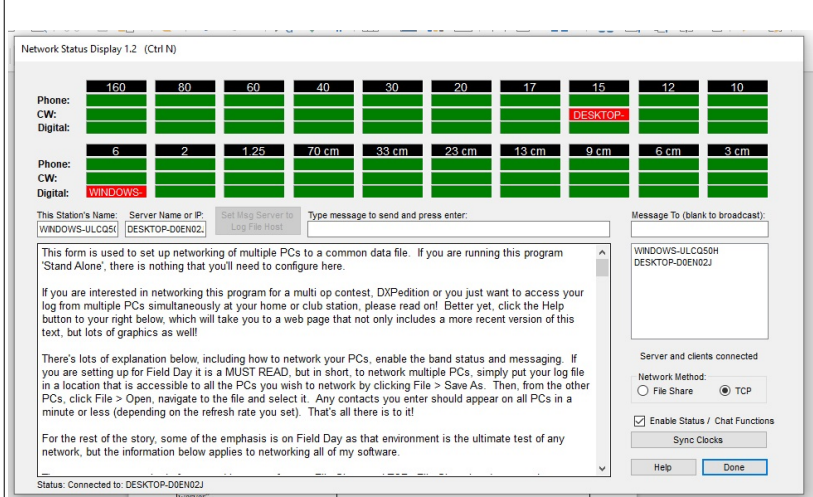


NOTE: **The "This Station's Name" should be identical with what WINDOWS calls the name of the computer.** If you want to change the name of the computer go to Windows SETTINGS, then SYSTEM, then in the list in the left margin, choose ABOUT and you'll see the name and have a chance to save it. Inside N3FJP you should use this same exact NAME to refer to this computer.
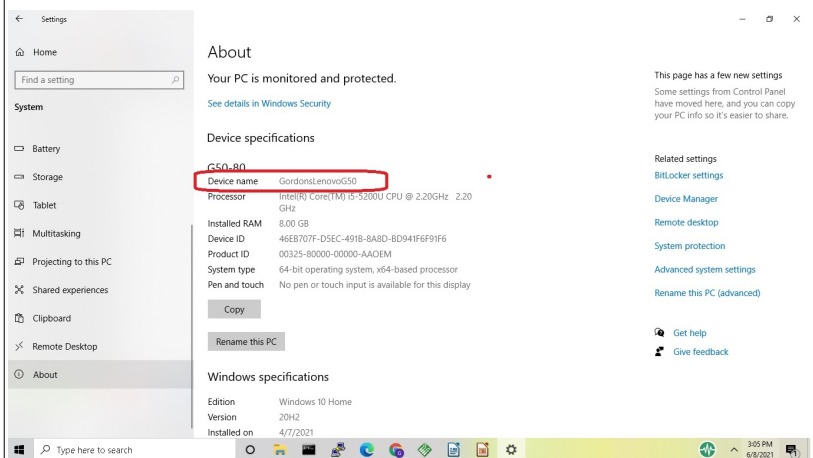


On the computer that you will use as your SERVER, in the option Networking, that should be both the This Station's Name and the Servers's Name or IP and it should show itself in the computer list above.
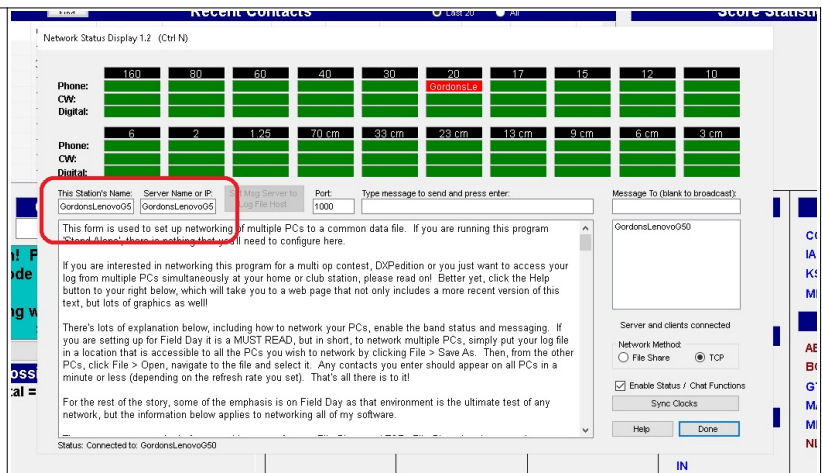
[In this figure, one of my computers is being tested as a logging server -- this is NOT necessarily the one to be used in your setup!]

No longer required if using direct interface WSJT-X to N3FJP: ~~That computer's logging file directory should be completely shared, with Read/Write permissions and everything..  SEE ENTRY **4.  Sharing the logging server main database.**  in the left hand column below...~~
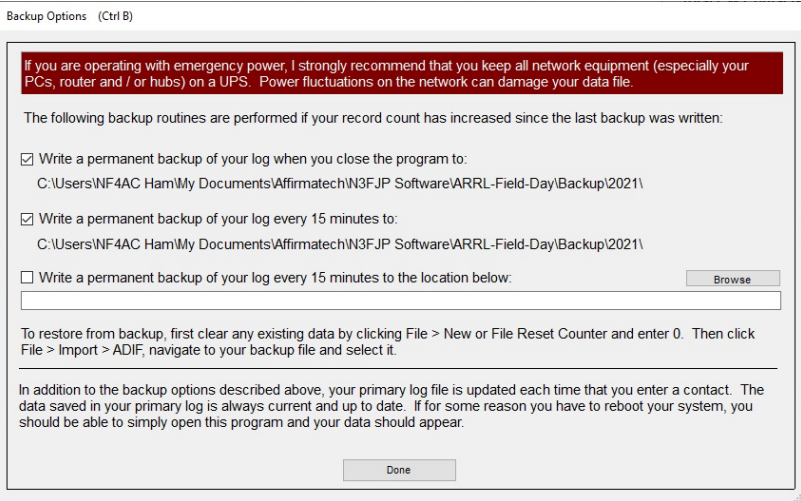
1.  Server Name or IP:   In the photo I have the Server Name, but I believe it can be the IP number as well.   Note that the PORT used between instances of N3FJP Contest Log is 1000.

2.  Select TCP as the "Network Method"[1]

3.  Check the box to enagle Status/Chat Functions.

4.  Click done.

I do not know whether the software has to be restarted to make this take effect.   But I suggest it.

Other computer instances of the N3FJP Field Day log must have the NAME or the IP Number of the "logging server" correctly entered within the Server Name or IP box.

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1   I have gotten this to work using "file sharing" also….but logged QSO's are much much slower to show up in the logging server's database, and multiple writers on Internet forums have cited difficulties in reliability with this method, somewhat related apparently to unreliabilities of their networks, but somehow better with tcp/ip.   Not sure why, but the general opinion is to favor tcp/ip communications.

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| NO LONGER REQUIRED<br><br>3.  Logging Server PART TWO -- sharing the logging database directory on the network.  (Required in order to get JTAlert to work.)<br><br>NOTE:  IF YOU ARE OPERATING ONLY ONE STATION, ONE COMPUTER, YOU DON'T HAVE TO DO THIS SHARING STEP!  You will easily be able to browse right to the .mdb database file on your own computer in the steps below. | NO LONGER REQUIRED<br><br>Due to a limitation of JTAlert you will have to make the main logging server database file shared to each logging computer.<br><br>I recommend sharing just one directory…**and do NOT use the public Internet for this sharing, only your local private field day network, right?!**  Recommend you have an airgapped network for your field-day, not connected to the larger Internet.<br><br>Drill down past the Affirmatech and N3FJP Software directories wherever your logging computer has stored its log, and work to share just the `ARRL-Field-Day` subdirectory.<br><br>Right-click on the ARRL-Field-Day subdirectory, choose Properties, choose the Sharing tab,<br><br>– Click SHARE to share it,<br>– in Advanced Sharing, click checkbox Share this folder,<br>– Limit the number of simultaneous users to a reasonable number such as 6, 8 or 10.<br>– Click on permissions, slect the group Everyone, and give them FULL CONTROL  (which includes Allow for Full Control, Change and Read)<br><br>At the bottom of the Sharing tab page, click the link for the Network and Sharing Center,<br><br>Private network,   turn on network discovery, turn on automatic setup of network connected devices.<br>Turn on file and printer sharing.<br><br>Under All Networks, Windows doesnt have a choice to turn off their own sharing encryption, but you can set it lower at 40 / 56 bits -- we have a totally open sharing here on our private network, where **anyone can read the database so there is no need or effort to obscure what is transacting**.   Turn OFF password-protected sharing.   Otherwise your transmitter stations will have problems getting to this directory.<br><br>I also turned OFF sharing of the PUBLIC directory.   The only directory that I wish to share is the ARRL-Field-Day. |

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| 4.  Configuring Log Backups on client computers. | You will probably want to have a permanent backup written every 15 minutes not only on your "logging server" but on each of your logging computers also…., and then write a permanent backup to a different location when the entire contest is done.<br><br>Click File \| Backup Options to make these choices:<br><br> |
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| |

| | specifically the "System type" and it will tell you. Only use the x86 installation if you find that your computer is a 32-bit computer (rare these days).

Then drop down in hamapps.com to the Download JTAlert section and download & install (https://hamapps.com/JTAlert/ )

The version I have found to install is 2.50.1

Drop slightly further and use the link in the Download Sound Files section: https://hamapps.com/Sounds/

(I don't think we need the "callsign database") |
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| NO LONGER REQUIRED

6.  Configuring the JTAlert Software: (One copy running on each radio-associated computer) | NO LONGER REQUIRED

In the JTAlert Settings, you'll need to make various settings and also go FIND the database file that N3FJP is logging to (.mdb), within the shared ARRL-Field-Day directory on the logging server.

The instructions for this part of the configuration are a little farther down the page of http://www.n3fjp.com/help/digitalsetup.html  in the section that begins with this line:

In addition to Amateur Contact Log, with JTAlert 2.12.10 and later, Laurie has added contest program support too!

(The following instructions didn't quite match my JTAlert, see my notes below)

INSTRUCTIONS THAT SEEMED OLD
From the menu options in JTAlert click Settings > Scan Log and Update.
- Click the plus by Logging.
- Select AC Log.
- Click the check box for Enable AC Log Logging.

INSTRUCTIONS TO MATCH WHAT I FOUND

I had to pick Settings > Manage Settings, and then click the plus sign by Logging to expand Logging, |

then select AC Log,

then Enable ACLog Logging,

click MANUAL configuration within ACLog Configuration,

set the IP number to that of the logging computer (probably better to use the actual 192.168.whatever.whatever number your DHCP server is giving it),

the port is 1100, and

I had to use the SELECT button to go find the .mdb file which was (in this instance) under my

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User/UserName/Documents/Affirmatech/N3FJPSoft
ware/ARRL-Field-Day/LogData.mdb
```

which was found by searching under the NETWORK portion of the file directory listing, then selecting the proper logging server, and then delving into the shared directory to click on the proper Log.

– it may be a different name for our Field day log
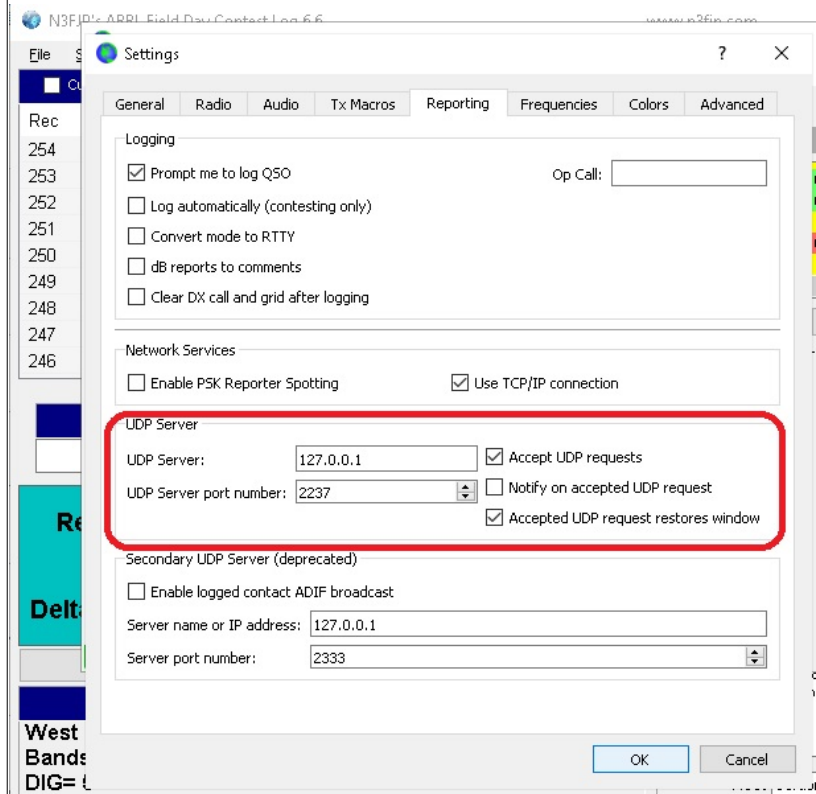
It ended up looking like this:
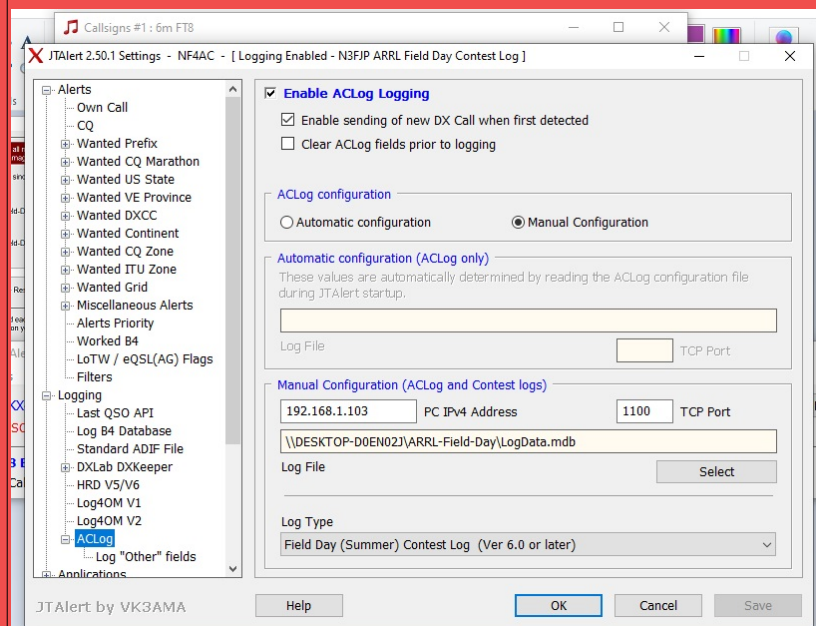
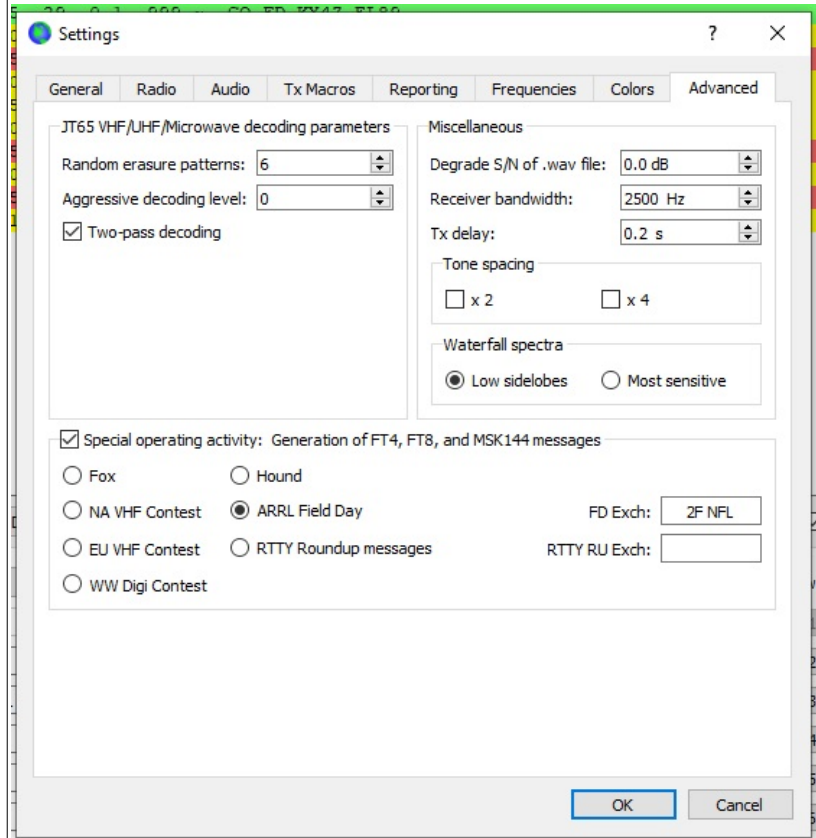| | |
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| | Note that JTAlert has to be stopped and restarted to load the new features.<br><br>Multiple writers on forums have stated you should open JTAlert as ADMINISTRATOR. |
| 7. Configuring WSJT-Xon each radio-associated computer | File \| Settings;  Reporting Tab<br><br>1. UDP Server – Leave the IP number at 127.0.01 and UPD port at 2237 -- these are the defaults for N3FJP.   Click "Accept UDP Requests" and "Accepted UDP request restores window"<br><br>2.  It appears that it doesn't matter  if you click "prompt me to log qsos" -- even if you don't, you can be prompted.<br><br>3..  If you click "Log automatically (contesting only)" it will log completed contacts immediately without prompting you at all -- you cansee them show up in N3FJP "Recent Contacts" This is probably a user-preference item.<br><br> |

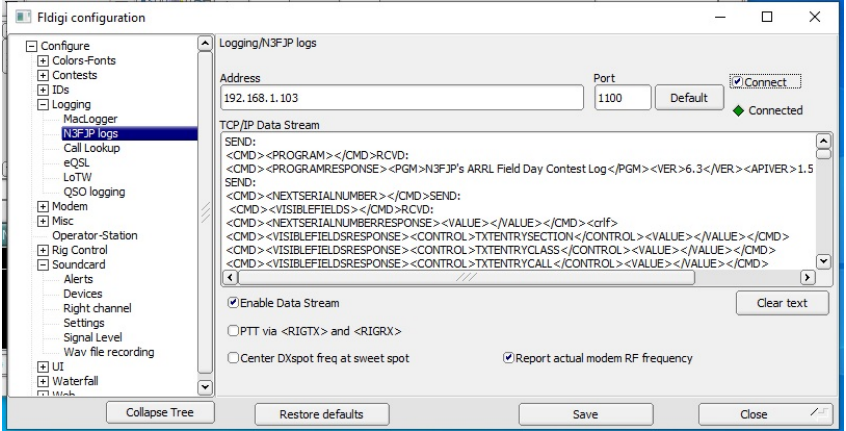| | |
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| | **<u>SET FOR FIELD DAY</u>**<br>Now skip to the Advanced tab, and<br>Click "special operating Activity<br>Click circle for ARRL Field Day<br>Fill in the Field Day exchange for your group<br><br><br> |
| 8.  Only TWO pieces of software needed now:   N3FJP ARRL Contest Log and WSJT-X. | |
| 9.  TEST THIS ENTIRE SETUP!!  If you're the person setting it all up for a club or group!<br><br>You can do this by having the computers use their speaker and internal microphone to call each other.[2] | N3FJP will still keep its own internal log on that particular computer.   It looks like this: |

When a contact is completed, N3FJP will put up a dialog box asking you to confirm you are ready to log it. Click to do so. It will immediately show up in your N3FJP log. If it is a duplicate, you'll be notified and it won't be added.
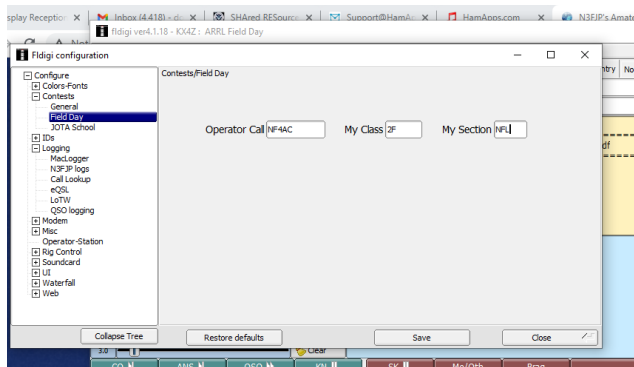


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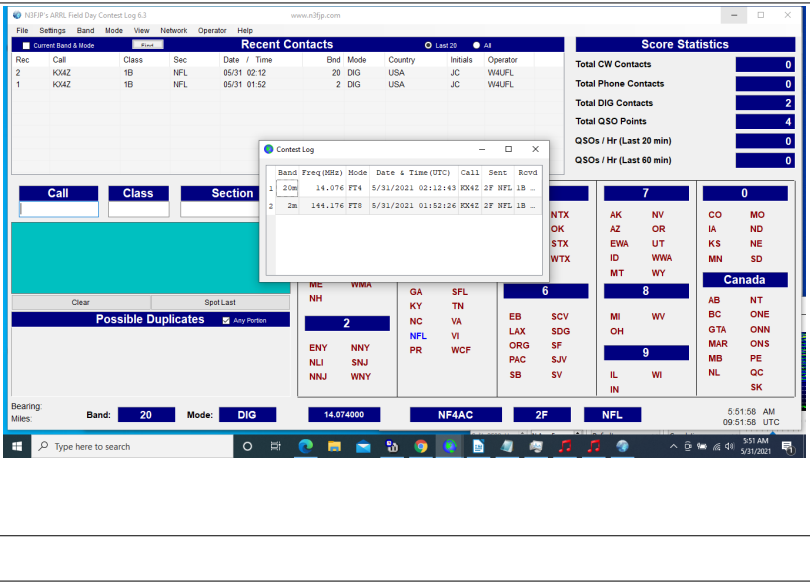
2   The software detects if you try to create a fake log entry that doesn't match the scripts it has generated, so you need to actually create real communications.   Doting this over simple audio isn't difficult and makes it easy to test; simply change the "band" to avoid duplicates.

# CONFIGURING FLDGI to log directly into N3FJP

FLDGI has the ability to directly connect to N3FJP.   But it turns out not to be that much of an advantage, whereas with WSJT-X, it is a huge advantage.

| Steps | Details / Comments |
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| NOTE:  Rig control option flrig is the one that we are using since it seems to be the only one that works properly. | |
| In FLDGI bring up the Configuration (different versions present this differently)<br><br>Expand LOGGING<br>Choose N3FJP logs | <br><br>Check for the correct IP number of the logging computer and the PORT 1100<br><br>Click CONNECT and it should connect, tell you that it is connected, and show a bunch of stuff in the box "TCP/IP Data Stream" |
| Expand CONTESTS, choose Field Day | Enter the call sign NF4AC<br>Class 2F<br>Section NFL |

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| |  CLICK SAVE |
| Capturing data from a Contact<br><br>(It's the same whether you are using PSK31, CW, or RTTY) | Two methods:<br>1) You can just type in the Call, Class and Section yourself<br>2) Or if typing is hard for you, you can SELECT (left mouse button) the relevant text in your receive pane, Right Click to get the save options, left click on the appropriate Call, Class or Section.<br><br>Note that N3FJP will immediately notify you if this is a possible Duplicate – and it does that based on the FREQUENCY (band) displaying in FLDGI.<br><br>When you have all the information entered, you can click the SAVE button to enter the entire log entry into N3FJP.<br><br>You can clear the log entries section with the broom button.<br><br>3) You don't have to even use this. You could just log directly in N3FJP by typing there.<br><br> |