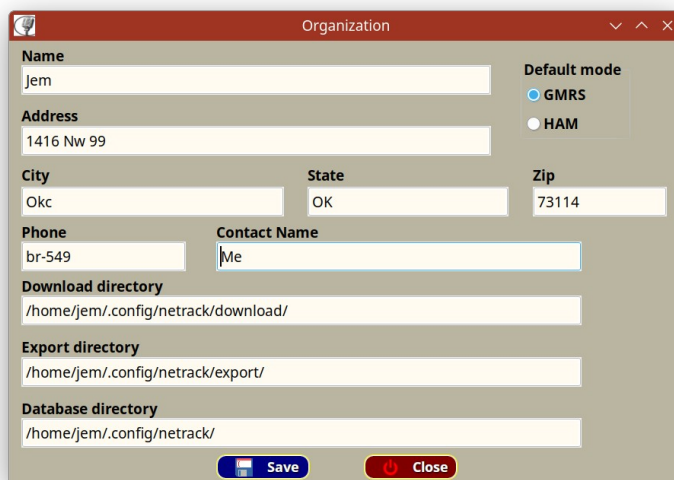


NetTrack Radio Net logging Software
by Jem Miller (GMRS WROU278)
Missing Link Software
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NetTrack is intended to ease the burden of tracking checkins during net meetings for GMRS and HAM. This software heavily uses the right mouse button to show menus. The menu options change depending upon where you are in the program. So, if you want to do something in a particular area, you likely need to hit the right mouse button to do it.

When NetTrack is first run, you will be required to enter configuration info for your club or organization. It's fast and easy to complete, but it is required for other operations such as printing reports and license searches. You don't have to worry about all those directories (folders) NetTrack sets those up for you. You should not change those directories unless there is a good reason. You also need to select a default radio service. This defaults to GMRS but only because it is alphabetically first.



The screenshot shows the 'Organization' configuration window in NetTrack. The window has a title bar with 'Organization' and standard window controls. The form contains the following fields and options:

- Name:** A text field containing 'Jem'.
- Address:** A text field containing '1416 Nw 99'.
- City:** A text field containing 'Okc'.
- State:** A text field containing 'OK'.
- Zip:** A text field containing '73114'.
- Phone:** A text field containing 'br-549'.
- Contact Name:** A text field containing 'Me'.
- Default mode:** Two radio buttons, 'GMRS' (selected) and 'HAM'.
- Download directory:** A text field containing '/home/jem/.config/netrack/download/'.
- Export directory:** A text field containing '/home/jem/.config/netrack/export/'.
- Database directory:** A text field containing '/home/jem/.config/netrack/'.

At the bottom of the window are two buttons: 'Save' (blue with a floppy disk icon) and 'Close' (red with a power icon).

Main screen

When you start NetTrack you will see a split screen with net session on the top and checkins on the bottom. The sessions are sorted by date with the latest first, so this will always be the last net session displayed. There are 3 buttons in the top section, 2 tabs, and a menu system. The tabs are for this page (Checkins), and a People tab. Clicking on People will let you add, edit, or delete people as well as print a member list. Member list may not be accurate here. It will print all people that have checked in during a net session, along with the their membership status to your organization.

NetTrack v1.4.5

Main Config Help

Check Ins People

Date 02/11/2023 Time 12:01 Net Name Emergency readiness checkin 11:31.18 AM

Net Control Jem Wrou278 New Session Save Changes End Session

Checkins : 7 Type : GMRS Session ID : 01422536 Known Call Signs

Callsign	Name	Location	Chk Only	Traffic	Member
WRUY701	Howard	Warr Acres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WRPQ850	Rollie	Mwc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WQZV778	Quincy		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WRMK842	Chris	Choctaw	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WROU278	Jem	The Village	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WRUI368	Don	Nw Okc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WRVQ464	Steven		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Type a callsign or part of a callsign to match, or click the down arrow beside the Quick Search box above to see the list. Press the ENTER key to add that checkin to the list on the left. Press F1 for help.

Canon_G3060_series Print Session FCC Search Close

You will need to add people to your database. This process is as automated as I can make it. You will also need to add net sessions to the database. To do that, click on the Config tab of the main menu at the top, or right click and select Net Maint.

Net Maintenance

Name	Schedule	Purpose	Controller
Emergency readiness checkin	Saturdays at Noon	Readiness checkin practice in case of emerg	Varies
Ham Info Meet	Someday	stuff	Varies
Info Net	Sundays at 7pm	General information NET	Varies
Makeshift Tech Net	1st and 3rd Wednesday at 8pm	Technical discussions about the radio hobby	Varies

Add a Net Meeting Edit a Net Delete a Net Close

Here you can enter all of the net sessions that you do each week/month/whatever along with scheduling information. Again, it's a simple process. You can also edit session info or delete sessions from the database. You can also add a script here if you switch net controllers. That way the net sessions always have the same flow. If you are in both a GMRS and a HAM organization, you should designate nets for each just to avoid confusion. When you add a new net, you will get to select which service (GMRS or HAM) it is for.

Normal operations

You will spend most of your time on the Checkins tab. Here you can start and end net meeting sessions and record checkins. You can't do much here without starting a session first, so lets do that.

Click the New Session button and choose the net session. Most fields will be filled in for you. Next you might need to change the Net Control field since it also defaults to the assigned name in the sessions file. Most of our sessions have Varies as the net controller, since it rotates between controllers. When you are ready to continue, click the Save Changes button and announce your net session.

On the right side of the screen is a callsign entry box. You can click the down arrow on the right of the box to get a drop down list of all known callsigns and names. You can choose from the list as people check in, or you can just type in the callsign and the closest match is displayed as you type. In most cases you only have to type 3 or 4 characters before the match is shown. When it is, just hit the ENTER key and the information will be entered into the Checkins grid to the left.

If the user is not in the current list, then NetTrack will check the FCC database for a match. If it finds the user, it will enter him/her into the checkins grid and it will add them to the members base (in the People tab) so they will be known the next time they check in. If a match is not found, NetTrack will show a message that says that. That way you can verify that the callsign was correct. A right click in the checkin grid will allow you to add an entry manually if you wish.

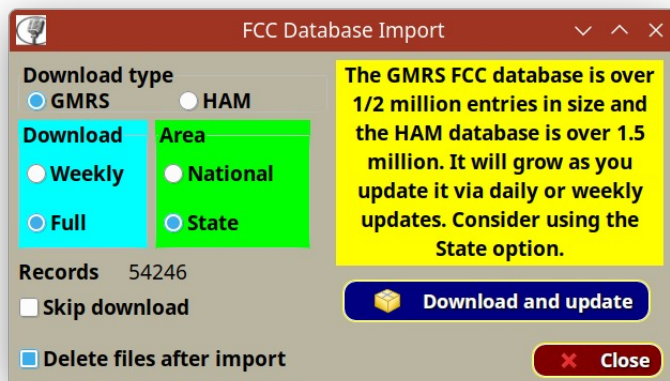
There are check boxes in the checkins grid for *Member* if they are a member of your club, *Chk Only* if they are check in only, and *Traffic* if they have official traffic for the net. Each of these just requires that you click the box that is needed. Again, the right click inside of the checkins grid will allow you to manually add a user, or delete a user. If you need to edit a part of the users information displayed in the grid, just click on that cell. Be aware that 1 click will highlight the entire cell entry so that it will be replaced by anything you type. 2 clicks will highlight a single word, and 3 clicks will place a cursor where you are clicking. Editing is the slowest of the operations. When the edit is

done, press the ENTER key to force NetTrack to update that record. Be aware that an edit in checkins does not update the members DB.

Once the meeting is over click on the End Session button to close the session and put the final time stamp in the file. You can manually enter any new checkins if you didn't do them on the fly if you need to. If there are late checkins after the session is closed, you can still enter them just as you did during the net. The only difference is that once you are finished making any late entries, right click inside the grid and select End session to update the new end time for this session.

FCC Database stuff

To use the FCC database functions, you must first download and import it from the FCC. To do that, look at the main menu bar just below the NetTrack program header at the top. Click on Config, and then in the sub menu, click on Import Database at the bottom, then click on FCC Db at the bottom of that menu. Now a small dialog will pop up with several options.

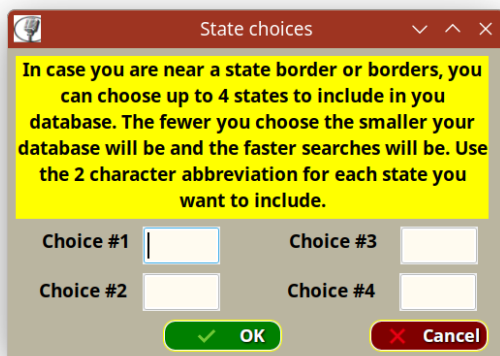


At top left will be Download type and a choice of GMRS and HAM. Click the one for the type of database you wish to import. Don't worry, you can get both, but only one at a time. Below that are Download, and Area to the right. Under Download is Weekly and Full. You will either have to download a full DB or get one from another net controller that uses NetTrack. The reason is that the Weekly option only gets licenses issued between the previous Monday through Saturday, or whatever day it is now if it is in that range, plus last weeks files that make up the files through Saturday. So this Weekly option is great to do every Sunday or Monday each week to merge new licenses into your existing FCC DB, but it does not get you a DB with any entries before this week. The default is Full.

For that reason, you have to start with a full DB, but you get to choose what is in that DB. To do that, select the Full option, and then decide if you want to use the complete national DB, or add only 1 to 4 states. Using the State option is the way to keep disk space small and speed fast. I'm in Oklahoma, and we get travelers and visitors in some net sessions, so I run 4 states in my DB. Those are OK, TX, KS, and AR. So, Oklahoma and the states that surround me, Texas, Kansas, and Arkansas. This is a choice to cut down on the drive space required in the database. You don't have to fill in all 4, you can just put in the official state initials for your state if you want.

Currently there are over 503,000 GMRS licenses in the full FCC DB, and over 1.6 million HAMs. NetTrack can process the entire GMRS list in just under 4 seconds, and the HAM list in just under 9 seconds on my Ryzen 7 laptop with 32GB of memory on a 512GB SSD. Your mileage will vary depending upon your computer. The longest I have seen is 2 minutes and 11 seconds on a computer that I built back in about 2011. Regardless, let's continue getting the DB on our computer.

Once you decide which option to make between the national or state DB that NetTrack will compile, you can download it. There are 2 other options that allow you to skip the download process and whether to delete the downloaded files after your DB has been compiled. Normally you will leave those options as they are set by default. That allows NetTrack to clean up after itself and not use more disk space than needed.



State choices

In case you are near a state border or borders, you can choose up to 4 states to include in your database. The fewer you choose the smaller your database will be and the faster searches will be. Use the 2 character abbreviation for each state you want to include.

Choice #1 Choice #3

Choice #2 Choice #4

Once you click the big blue Download button, you will get to choose the states to compile into your DB if you chose the State option. If so, fill in the abbreviations for up to 4 states to compile into your local FCC database and click the green OK button.

If you skipped the state option and chose to download the full national DB, you will skip the dialog above, and see a yellow dialog telling you how long this might take (on something like a Commodore 64). Once that dialog vanishes, NetTrack will report how many records your DB contains now, how many records that were processed in total and

how long it took. When you click the OK button, you will be back at the main part of the program looking at the Checkins screen again. You can click on one of those entries (if any) and then click the FCC Search button at the bottom of the NetTrack window to test your shiny new DB.

FCC License Lookup

CallSign: WROU278 Search

You may enter any callsign or a name in the format: Last, First

Details

Callsign: WROU278 FRN: 0030967533

Name: Miller, Jim E

Use: GMRS Status: Active

Type: ZA Issued: 12/09/2021 Expires: 12/09/2031

Address: 1416 Nw 99 St.

City: Oklahoma City State: OK

Phone:

Search type: ☒ GMRS ☐ HAM

Close

While you are in the FCC search dialog, you can play around with different callsign searches. You can also search by a name, or parts of a name. For fun, enter your last name into the search box and hit ENTER. Names are last name first and are stored as Last, First middle initial. So my entry is Miller, Jim E (because they thought Jem was a typo I guess) including the comma (the ,). You can also choose which database to do the lookup in here as well. If you got here by clicking on a checkin and then clicking the FCC Search button, the search type will match the type of checkin session of that checkin entry.

Other stuff to do

In the Config menu (top menu) is Net maint, Cleanup Database, Export Database, and Import Database. Net Maint is used to add, edit or delete your various net sessions. The Cleanup Database does maintenance on your current database files making sure that any stale deleted records or empty space gets removed. It also does an integrity check of the DB.

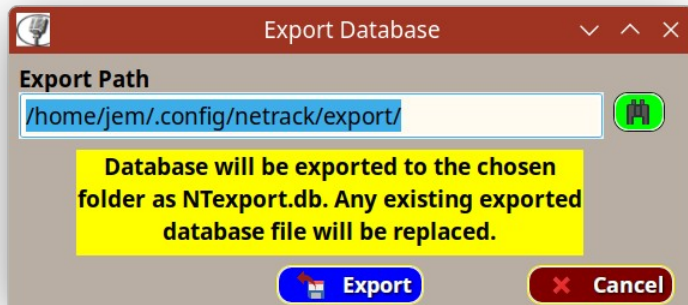
Export Database lets you export your net DB so that others can merge you entries into their database. This does NOT replace the existing DB, it merges in newer entries that are not already in your DB. The exported file will be in the NetTrack work directory

(folder) at :

C:\Users\YOUR USER NAME\AppData\Local\NetTrack\export\NTextport.zip

OR

/home/username/.config/NetTrack/export/NTextport.zip on Linux systems.

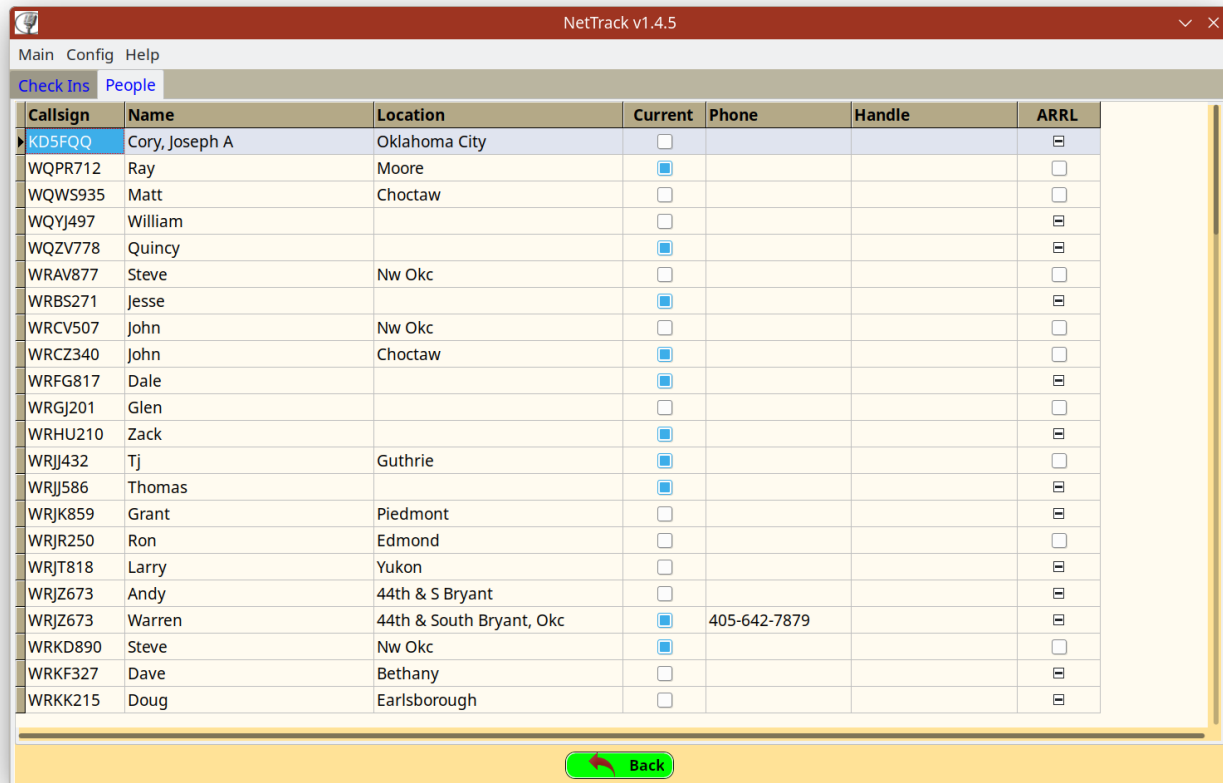


Import Database is where you can import someone else's DB into yours. Again, this merges newer records, leaving your existing records alone. I should say that it merges records that are not in your DB regardless of how old they may be. You will need to tell NetTrack where to find the file to be imported. We already did an FCC Database import, so now let's look at the members DB.



Fill in the directory and filename of the file to import. This defaults to your export directory, but you can use any location that you want. You do not need to enter the file name. NetTrack will only import a file named NTextport.zip or Ntextport.db. This is so you do not need to unzip the export file, NetTrack will do that for you. The directory path will be remembered and displayed the next time you import a DB.

The Members DB in the People tab lists everyone that has checked into a net session or has been imported from other DB's. Right click in the People grid to see your options here. You can manually add users which includes a yellow button with a magnifying glass to do an FCC search on the callsign that you entered. If it is found, the remaining major fields are filled in for you. If not, it displays a message telling you the callsign was not found, but it will still allow you to enter the rest of the fields if you want to.



Callsign	Name	Location	Current	Phone	Handle	ARRL
KD5FQQ	Cory, Joseph A	Oklahoma City	<input type="checkbox"/>			<input type="checkbox"/>
WQPR712	Ray	Moore	<input checked="" type="checkbox"/>			<input type="checkbox"/>
WQWS935	Matt	Choctaw	<input type="checkbox"/>			<input type="checkbox"/>
WQYJ497	William		<input type="checkbox"/>			<input type="checkbox"/>
WQZV778	Quincy		<input checked="" type="checkbox"/>			<input type="checkbox"/>
WRAV877	Steve	Nw Okc	<input type="checkbox"/>			<input type="checkbox"/>
WRBS271	Jesse		<input checked="" type="checkbox"/>			<input type="checkbox"/>
WRCV507	John	Nw Okc	<input type="checkbox"/>			<input type="checkbox"/>
WRCZ340	John	Choctaw	<input checked="" type="checkbox"/>			<input type="checkbox"/>
WRFG817	Dale		<input checked="" type="checkbox"/>			<input type="checkbox"/>
WRGJ201	Glen		<input type="checkbox"/>			<input type="checkbox"/>
WRHU210	Zack		<input checked="" type="checkbox"/>			<input type="checkbox"/>
WRJJ432	Tj	Guthrie	<input checked="" type="checkbox"/>			<input type="checkbox"/>
WRJJ586	Thomas		<input checked="" type="checkbox"/>			<input type="checkbox"/>
WRJK859	Grant	Piedmont	<input type="checkbox"/>			<input type="checkbox"/>
WRJR250	Ron	Edmond	<input type="checkbox"/>			<input type="checkbox"/>
WRJT818	Larry	Yukon	<input type="checkbox"/>			<input type="checkbox"/>
WRJZ673	Andy	44th & S Bryant	<input type="checkbox"/>			<input type="checkbox"/>
WRJZ673	Warren	44th & South Bryant, Okc	<input checked="" type="checkbox"/>	405-642-7879		<input type="checkbox"/>
WRKD890	Steve	Nw Okc	<input checked="" type="checkbox"/>			<input type="checkbox"/>
WRKF327	Dave	Bethany	<input type="checkbox"/>			<input type="checkbox"/>
WRKK215	Doug	Earlsborough	<input type="checkbox"/>			<input type="checkbox"/>

To edit a user record here is just like editing in the checkins grid. Click the grid cell to edit (up to 3 clicks) and hit the ENTER key to force the edit to be saved. You can also print the user list from here if you'd like, but you should make sure the correct printer is selected at the bottom left of the checkins screen first.

Net History					
Net Sessions					
Date	Net name	Net control	Type	Start	End
02/11/2023	Emergency readiness checkin	Jem Wrou278		12:01	12:10
02/05/2023	Info Net	Kevin Wroh808		19:02	19:21
02/04/2023	Emergency readiness checkin	Jem Wrou278		12:04	
02/01/2023	Makeshift Tech Net	Don Wrui368		20:00	20:25
01/22/2023	Info Net	Don Wrui368		19:22	19:23
Checkins					
Callsign	Name	Location	Chk Only	Traffic	Member
WRUY701	Howard	Warr Acres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WRPQ850	Rollie	Mwc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WQZV778	Quincy		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WRMK842	Chris	Choctaw	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WROU278	Jem	The Village	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
WRUI368	Don	Nw Okc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WRVQ464	Steven		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Close					

Lastly, we have the history section. Here you can look back into time to see any of the nets that you have logged or imported from others. You can't do anything with the actual checkins from here. What you can do, is edit or delete a session. Keep in mind that deleting a session deletes ALL checkin entries that were in that session. If you absolutely need to edit a checkin record, then select the session that you want from here and then click close. That session will now be listed on the main page and you can mess with the checkins all you want.

That's the highlights of the NetTrack package and how it is used. The rest should be self explanatory, but I am happy to answer questions, take bug reports, or suggestions on how to make it better. I have now completed the HAM stuff as well. I hope you enjoy it, and drop me a note telling me where in the world you are using it from if you have the time.

Thanks,
 --- Jem (WROU278)
 Oklahoma City, OK.
wrou278@gmail.com or
jem@mlsoft.org (Missing Link Software)