Overview

Beginning with version 0.6 of JS8Call Monitor, support is included for resolving missing grid squares in received messages via local database files. This is useful for when internet connectivity is not available. Grid squares are required for the mapping applications to be able to plot points on the map for the received messages.

This instruction covers the setup and usage of the local database feature.

Prerequisites

Version 0.6 or higher of JS8Call Monitor.

Configuring JS8Call Monitor to Use Local Database Data

On the computer where you are running JS8Call Monitor, navigate to the folder where you installed the script.

Using your favorite text editor, edit the config file for your setup.

[DATABASES] location = c:\ham0\

Offline Lookups
FccData = false
HamCallCD = false
RacCD = false
LocalDB = false
LocalDB_learn = false
Collect_Rejects = false

- The **DATABASES** section contains the settings for using a local database for resolving missing grid squares in received messages.
- Set the **location** path to the location of the database files. If these files do not already exist, set the path to the location where you like the files to be saved. Make sure there is a trialing slash.
- Change **FccData** to true, to enable offline lookups using data from the local FCC database file JS8monitor_fccgrids.dat. This file is prepared using the Grids utility.
- Change **HamCallCD** to true, to enable offline lookups using data from the local Ham Call CD database file JS8monitor_hcgrids.dat. This file is prepared using the Grids utility.
- Change RacCD to true, to enable offline lookups using data from the local Radio Amateur Callbook CD database file JS8monitor_racgrids.dat. This file is prepared using the Grids utility.
- Change **LocaIDB** to true, to enable offline lookups using data from the local database file JS8monitor_localgrids.dat.

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- Change **LocaIDB_learn** to true, to enable the self learning feature. If you have enabled any of the online lookups supported by JS8Call Monitor, this feature if enabled, will automatically append the data from all successful online lookups, to the local database file. This is useful in two ways; a) It reduces the number of online lookups that are performed. This is important for online lookups that have limits on the number of lookups allowed. b) In the advent of an internet failure, the local database serves as a cache for the online lookups.
- Change **Collect_Rejects** to true, to enable capturing of callsigns that failed to resolve, to a file named JS8monitor_rejects.dat for later analysis and processing. This file is created automatically.

Save your changes.

Creating the JS8monitor_localgrids.dat File Manually

If you have set the LocalDB_learn parameter to true in the config file, the JS8monitor_localgrids.dat file will be automatically created in the location specified in the location parameter, the first time that a successful online lookup is performed.

If you have set the LocalDB_learn parameter to false in the config file, you will need to manually create the JS8monitor_localgrids.dat file.

To manually create the JS8monitor_localgrids.dat file do the following;

- Using your favorite text editor, create a new empty file.
- Save the file as a text file, with the name "JS8monitor_localgrids.dat" to the location you specified in the location parameter of the config file. Make sure the file extension is .dat and not .txt or something else.

Editing Local Database Files

Using your favorite text editor, open the desired local database file.

The local database files are organized as a series of lines. Each line contains a call sign, followed by a comma, followed by the corresponding grid square. The grid square can be any length, and the entries are not case sensitive. If you are using the LocalDB_learn feature, the last line of the JS8monitor_localgrids.dat file should be blank.

Example:

KU1U,FN44wc KN4TRT,EM70wl K8CJM,EM79vp <blank line>

Edit the file as you see fit, then save your changes.

Restart JS8Call Monitor if it is running.

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Host File

There is a special host file named JS8monitor_hosts.dat, that is included in the distribution zip file of JS8Call Monitor. This optional file is used to resolve IP addresses to human readable names for the log files. This file is completely independent of networking, so the names can be set to anything. For example if you are running multiple instances of JS8Call, each monitoring a separate band, you might want to name them something like 20M, 40M, and 80M.

The host file should be placed in the location you specified in the location parameter in the JS8Call Monitor config file.

The host file is organized as a series of lines. Each line contains an IP address, followed by a comma, followed by the corresponding name to show in the logs. The name can be any length, and the entries are not case sensitive.

Example:

192.168.0.1,20M 192.168.0.2,40M 192.168.0.3,80M

Edit the file as you see fit, then save your changes.

Restart JS8Call Monitor if it is running.

How it Works

JS8Call Monitor will attempt to resolve missing grid squares in received messages via the following;

The program will attempt to resolve the grid square by looking up the callsign in the offline databases in the following order;

FCC Data HamCall CD Radio Amateur Callbook CD (RACB) Local database file (JS8monitor localgrids.dat)

If the lookup is unsuccessful, the program will then attempt to resolve the grid square by looking up the callsign in the online databases in the following order;

callook.info (free) hamcall.net (free or paid)

If the LocalDB_learn feature is enabled and a match was found in one of the online databases, then the associated callsign and grid square information is automatically appended to the JS8monitor_localgrids.dat file. If the file doesn't already exist it will be created in the location specified by the location parameter in the JS8Call Monitor config file.

In all cases, first match wins. If the script is able to resolve the callsign via the HamCall CD data for example, the script will not query the rest of the databases.

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If any of the databases' enable parameter is set to false in the JS8Call Monitor config file, then that database lookup will be skipped.

If the lookup was completely unsuccessful, then the callsign is written to the JS8monitor_rejects.dat file if the Collect_Rejects feature is enabled.

License

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Change Log

Version 0.3 (November 2024)

- Updated documentation.

Version 0.2 (March 2022)

- Updated documentation.

Version 0.1 (March 2021)

- Original version.

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