dsmPlayer

License: GPLv2
Dirk Noack
dirk.noack@wxbasic.de
https://www.wxbasic.net
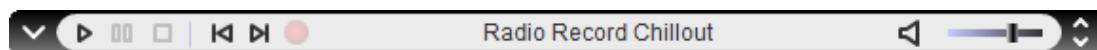https://www.forum.wxbasic.de

dsmPlayer (Duckes simple Media Player) is a small player for playing music and TV both from local files and by streaming from the Internet. It was written entirely in wxBasic and uses the system's media libraries for playback. Under Windows, the WMP10 library is primarily used. If this is not installed, Directshow is used. Under Linux this applies to GStreamer and under Mac Quicktime. However, only Windows is currently supported.

It is not software for managing music collections and was not developed for this purpose. The focus is on playing radio streams without annoying windows.

dsmPlayer was originally developed as a widget for Mhm, a hidden menu program (https://forum.wxbasic.de/index.php?topic=155.0), and is now available here as a stand-alone application.

In contrast to previous versions, all control elements are now drawn in the program itself. This means that external icons are no longer required.

A SQLite database with the name "IPTV.db" is used to store the Internet radio and TV stations. By default, the program uses a basic Kodi station list from Ink22's Github repository (https://github.com/jnk22/kodinerds-iptv). This has been extended by a few radio stations, some of which unfortunately do not have icon addresses.

The default setting contains approx. 500 radio stations and approx. 330 TV stations. However, the station lists can be expanded to approx. 28,000 radio stations and 10,000 TV stations from all over the world. The Github repositories from Junguler (https://github.com/junguler/m3u-radio-music-playlists) for radio stations and from IPTV-Org (https://github.com/iptv-org/iptv) and Free-TV (https://github.com/Free-TV/IPTV) for TV stations are used for this purpose.

An IPTV station list contains music and TV addresses together. dsmPlayer splits the lists and uses separate lists for TV and radio for a better overview. To do this, the player uses the specific names of the above-mentioned station lists. This does not necessarily work with other IPTV lists, as each usually uses its own names.

Kodi IPTV lists do not support genres. However, genres are supported in dsmPlayer, so that you can also customize the genres after the import.

If you want to create a new database, delete the existing database. A new database will be created the next time you start the program.

Since wxBasic itself does not support HTTPS, GNU Wget is used as the download program (https://www.gnu.org/software/wget/). Wget is not included in dsmPlayer and must be installed separately.

dsmPlayer uses other free software for certain actions (included in the package):

- Phiola (https://github.com/stsaz/phiola, 64 bit only)
  Phiola is used as a background program to read the metadata of radio streams and to record radio stations.
  In the future, Phiola could be used to edit mp3 tags, convert files between different formats and even replace the system's media libraries in dsmPlayer as a standard player.
  Currently, Phiola quits and restarts when a recording is made. Once recording is complete, Phiola is terminated again and restarted in playback mode. It may be possible to adjust this by extending the remote mode.

- Mp3DirectCut (https://mpesch3.de)
  mp3DirectCut can be used in the program to edit, normalize (mp3 only), repair or remove silence from mp3 or aac files.

Further features:

- Plays local files, Internet radio and acts as a helper for playing TV over the Internet
- Free positioning of the station list on the screen
- Recording tracks from the Internet Radio
- Autoplay at startup
- Minimization in the tray
- Hiding the player
- Favorites list for Internet radio
- Export Internet playlists
- Validate Internet playlists
- Sort Internet playlists
- Displaying station logos
- Search for stations in the station list
- Reading local playlists
- Track mix for local playlists
- Deleting local titles
- Batch renaming of local titles
- Saving the Internet playlists in a database
- Multilanguage support (currently only English and German)
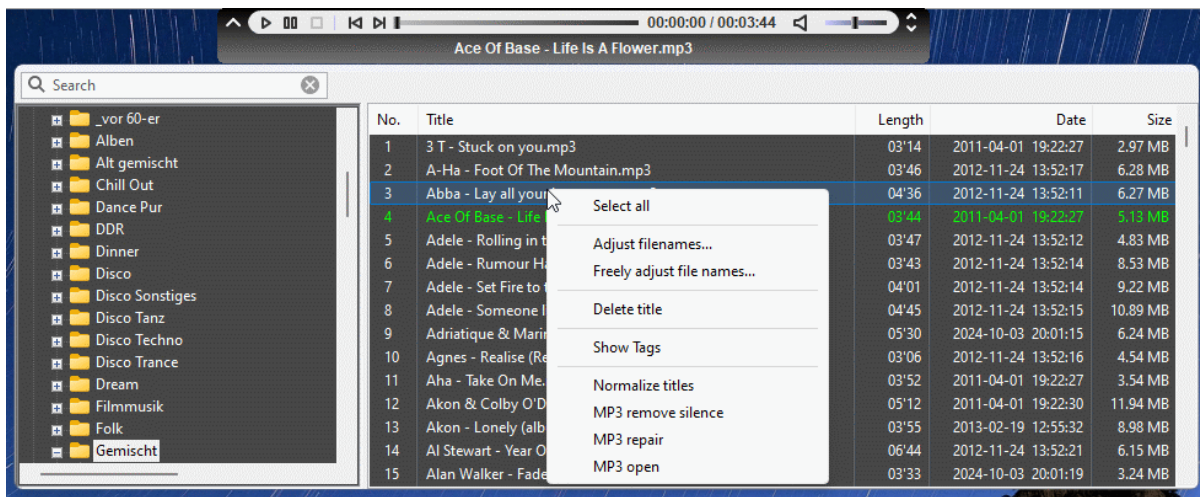- Portable, only one configuration is saved in the program directory

To do:

- Adding file conversions
- More options for recording
- More tasks for phiola

Restrictions:

- Only 1 genre can be specified per station. If more than one genre applies to the station, the station with the other genre must be added.
- Phiola sometimes crashes when streaming AAC stations, so that functions such as displaying the tracks or recording do not work. In this case, a message is displayed. Playback should then be stopped and restarted.
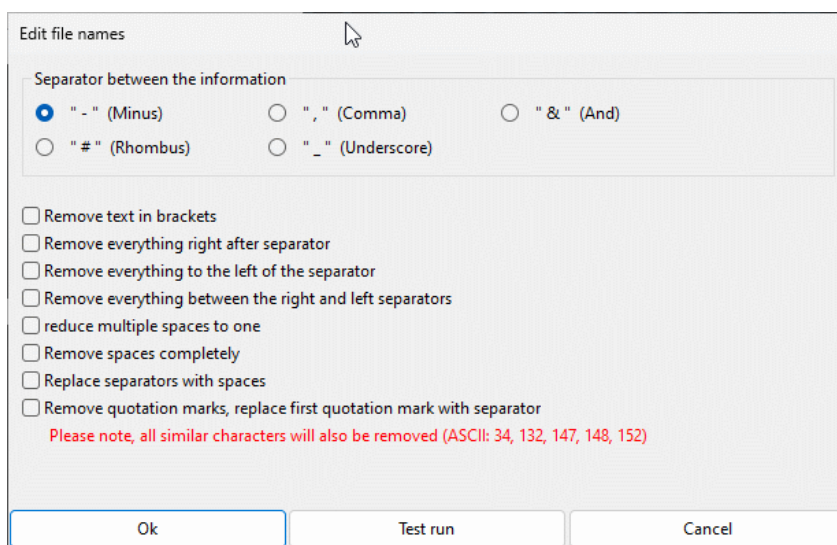- Phiola is currently only available as a 64 bit program.

1. *The playlist*

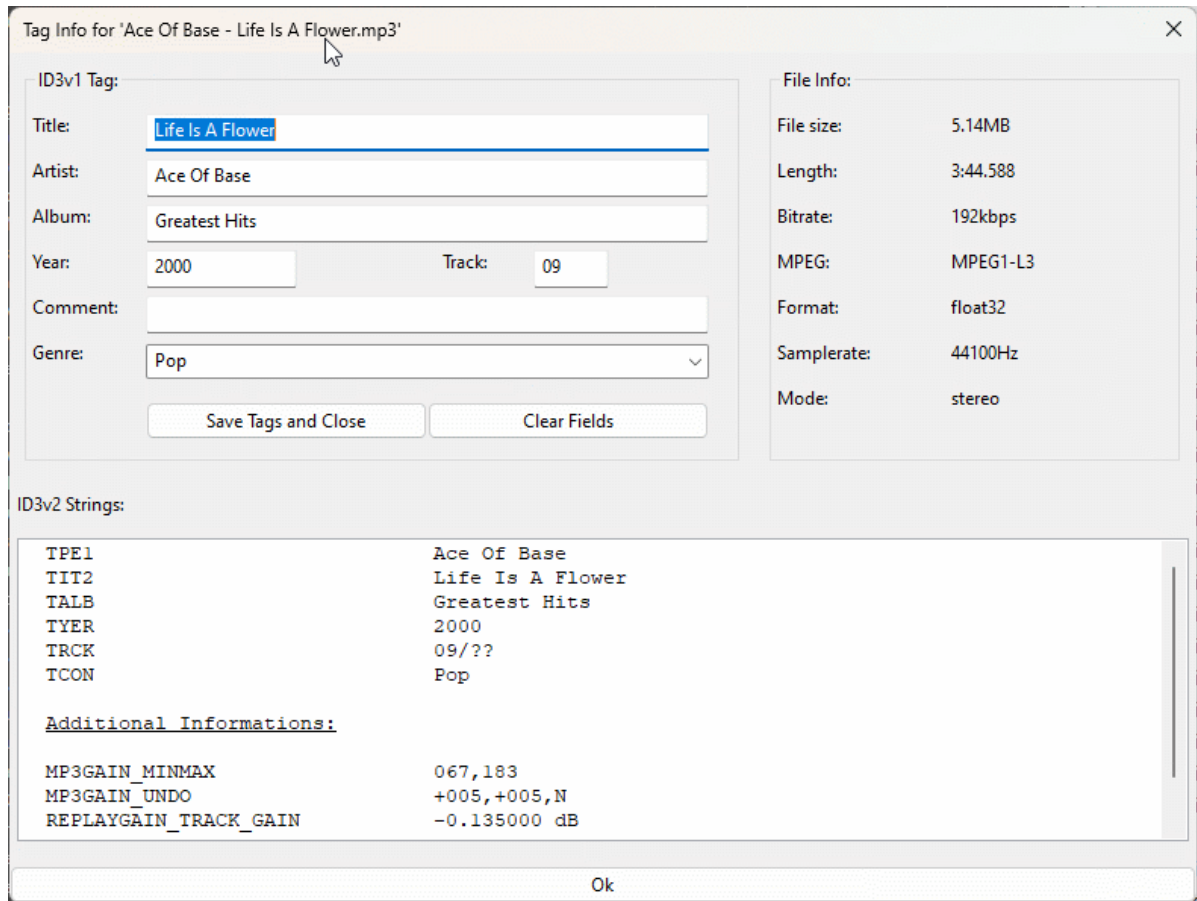The playlist is shown or hidden using the left arrow in the player.

In file mode, dsmPlayer works as a directory player. You can click through the individual directories and play files. It also supports m3u playlists.
A menu can be called up with the right mouse button. The following actions are possible here:

- Select all
- Customize file names (selected files)

Various options for batch renaming the selected files are available here.
A test run can be carried out before applying the changes. This gives you the opportunity to adjust the settings again if they are missing.
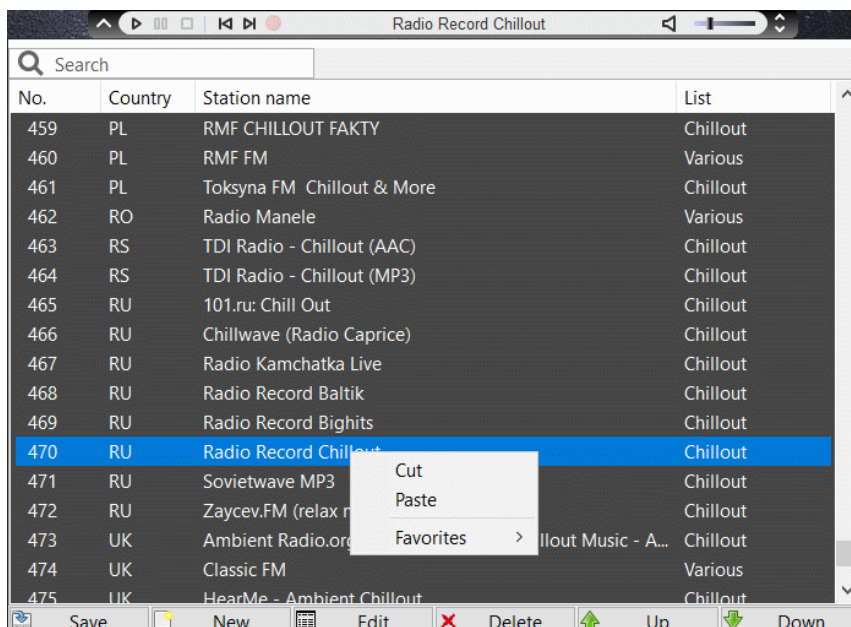
- Freely customize file name (current file only)
- Delete title (Attention! The file cannot be restored!)
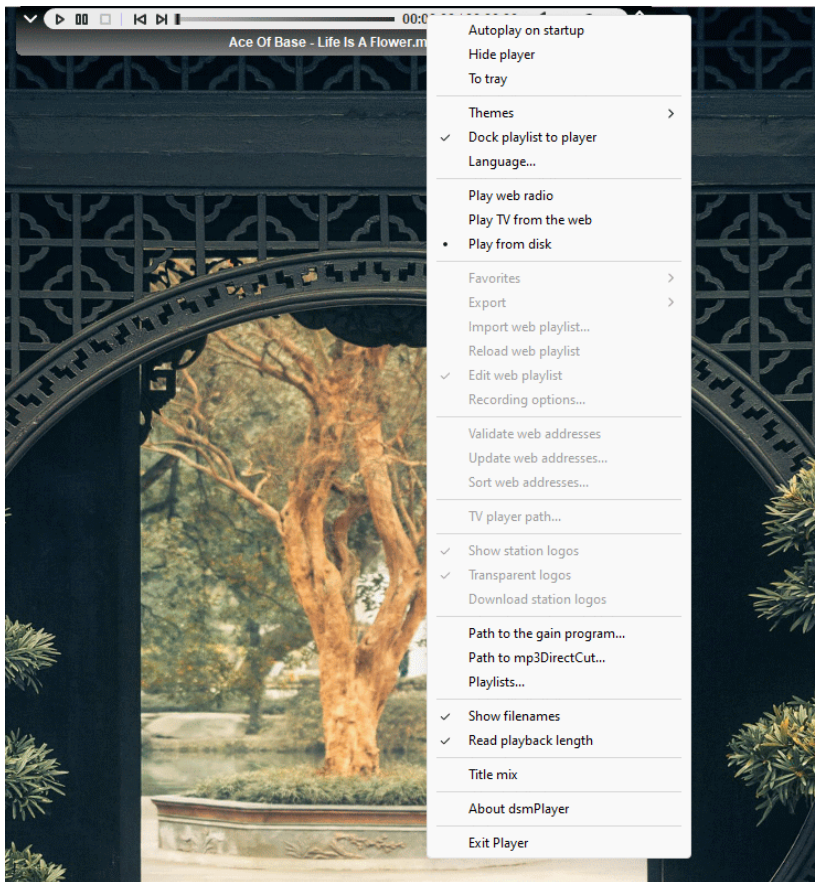- Show Tags…

- Normalize title (mp3)
- Remove silence
- Repair
- Open for editing

In web mode, the country code, station name and genre are displayed. There are 2 further columns for the station url and the icons. These columns are hidden by default, i.e. their column width is set to 0, as they are not normally required.

In edit mode, you can use the right mouse button to cut the selected stations and paste them elsewhere. You also have access to the favorites.

2. The main menu

In the main menu, you can perform all important actions and choose between the different modes:

1. internet radio
2. internet TV
3. local files

2.1. Autoplay on startup

If activated, dsmPlayer will continue playing at the start where it left off.

2.2. Hide player

This option hides the player so that you have the whole screen free. Nothing is displayed in the tray here either.
To bring it out, left-click anywhere at the top of the screen.

2.3. To the tray

This allows the player to be minimized to the tray. The most important actions are available in the tray menu.

2.4.   *Themes*

dsmPlayer currently supports 5 different themes:

- dark
- gray
- green
- blue and
- red

Choose a color for the player.

2.5.   *Dock playlist*

The playlist is shown or hidden with the left arrow in the player.

Normally, the playlist can be positioned freely on the screen.
If you activate this option, the playlist is docked to the player vertically and you can only move the playlist horizontally or change its size.

2.6.   *Language*

dsmPlayer can support other languages. At the moment, however, only English and German are implemented.

Please write a new language file for the player and I will add it.

2.7.   *Favorites (Web mode)*

In the Favorites menu, you can easily jump to a station you have previously added or remove the selected station.

2.8.   *Export (Web mode)*

Here you can export the playlists. There are 3 options available for this:

- as Kodi IPTV station list:
dsmPlayer has 2 separate station lists for TV and radio. When exporting to a Kodi station list, both station lists are merged and the genre is removed for compatibility. The Kodi format is used. Station logos are retained.

- as a mixed IPTV list
The TV and radio station lists are also merged here. The genres and station logos are retained.

- as a pure music playlist
This option creates a standard m3u music playlist. Any station logos contained are not saved. The TV station list is ignored.

2.9. Import web playlist (web mode)

This menu item allows you to import a single playlist.
You can specify the country of origin and the genre to be transferred.
If nothing is specified, the entry is taken from the import list, if available.
There are 224 genres available. To simplify matters, not all possible genres have been included, but only those that most stations have. This also applies to the countries. Please excuse this.

- Sort and save playlist
Displays the sorting dialog

- Ignore duplicate station addresses in any other genres
If a station in the import list has a different genre than in the database, the station is imported as a new station. This means that you have duplicate stations in the station list, but with different genres. This can be useful when sorting by genre. When activated, this is ignored.

- Only update existing stations
If a station with the same name already exists in the import list, only the station address and logo will be copied from the new list.
New stations are ignored.

- Import new stations and update existing ones
As before, new stations are imported.

2.10. Reload station list (Web mode)

Reloads the station list from the database.
Attention! All changes will be lost if they have not been saved beforehand.

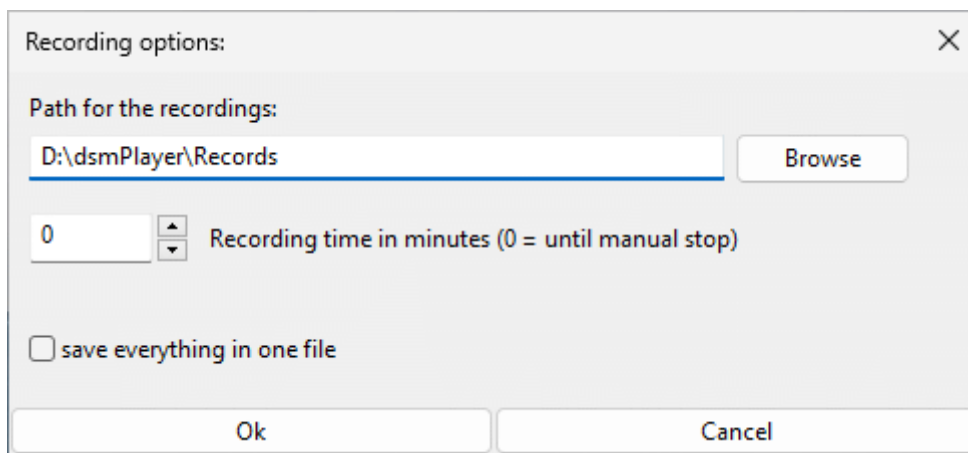## 2.11. Edit station list (Web mode)

Displays buttons for editing the station lists of the web radio or web TV. This is also the only way to save the station list manually.

Save   Saves the station list
New   Creates a new station
Edit   Edit the selected station
Delete   Delete the selected stations
Up   Move the selected stations one up
Down   Move the selected stations one down

Stations can also be moved using drag and drop. Multiple selections are possible.

After editing the station list, it must be saved manually. Otherwise all changes (including sorting) will be lost!

2.12. *Recording settings (web mode)*

The path for the recordings can be specified here.
You can also specify a recording duration. This is then ended automatically after the specified time.
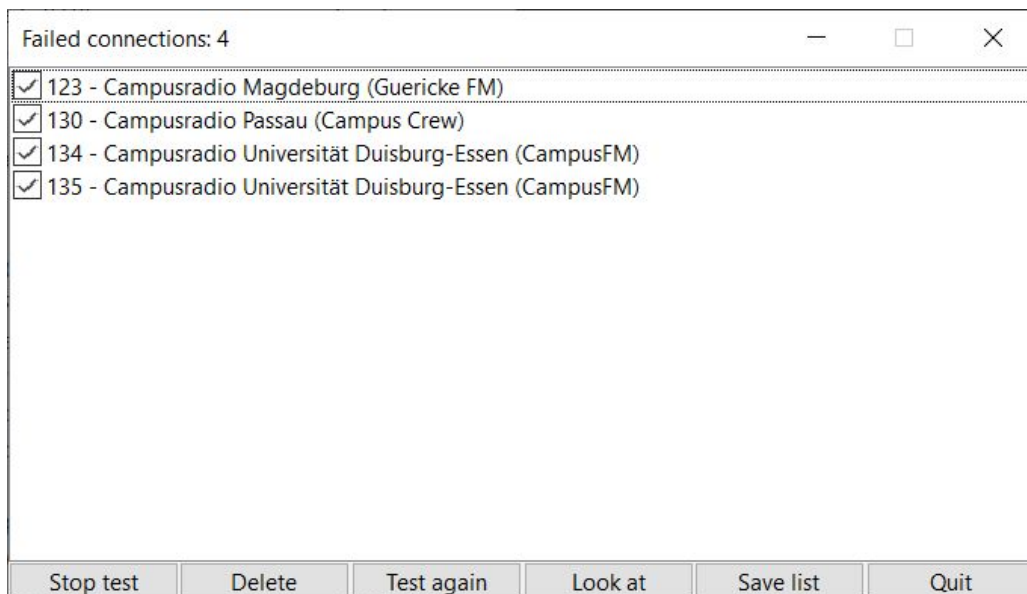Zero means until the manual stop. The recording is made in the "Artist - Title" style.
If "Save all in one file" is activated, the station is recorded in the form of "current date - current time" until the stop.

2.13. *Validate web addresses (web mode)*<g id='252'>

When validating the addresses, an attempt is made to contact the station for 15 seconds. If no contact is established, the station is added to a list of failed stations. From there, the failed stations can be checked again.
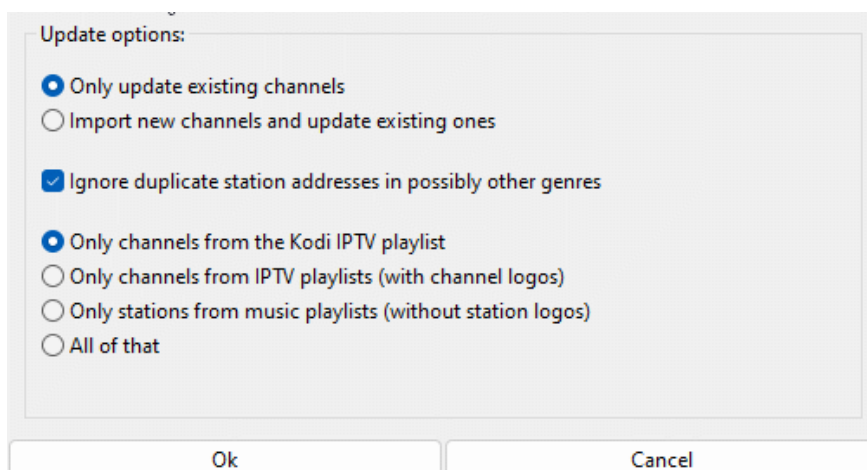

Stop test	End test
Delete	Delete the station from the playlist (Caution!)
New test	Retest the stations selected in the list
View	Open the selected station for editing
Save list	Save the list of failed stations as a text file
Exit	Stops the text and closes the window

Testing is only carried out with the selected stations. If none are selected, all stations in the list are checked. Depending on the size of the list, this may take several hours.
Caution! Testing the connection is only ever a snapshot. Not all stations play at all times of the day.
The station is removed from the station list when it is deleted. To permanently remove a station, it must be saved in the database.

2.14. *Update web addresses (web mode)*

An existing playlist can be updated here.
The following settings are possible:

- Only update existing
If a station from the import list with the same name already exists, only the station address and the logo are copied from the new list.
New stations are ignored.

- Import new stations and update existing
As before, new stations are imported.

- Ignore duplicate station addresses in any other
If the import of new stations has been permitted and a station in the import list has a different genre than in the database, the station will be imported as a new station. This means that you have stations twice in the station list, but with different genres. This can be useful when sorting by genre.

- Only stations from the Kodi playlist
Only stations from the Kodi repo are updated

- Only stations from IPTV playlists
Only stations from IPTV playlists that can also contain station logos are updated.

- Only stations from music playlists
Only stations from music playlists that do not contain station logos are edited.

All
It is updated from all playlists

Attention! The database will be overwritten when updating. Please make a copy of the database beforehand. dsmPlayer will not do this for you.

2.15. *Sort playlist (web mode)*

Sort playlist: ×

Sort options
○ By country
○ By name
○ By genre
● By country and name
○ By genre and name
○ By Country, genre and name

| Ok | Cancel |

The playlist can be sorted here according to predefined criteria. The following options are available:
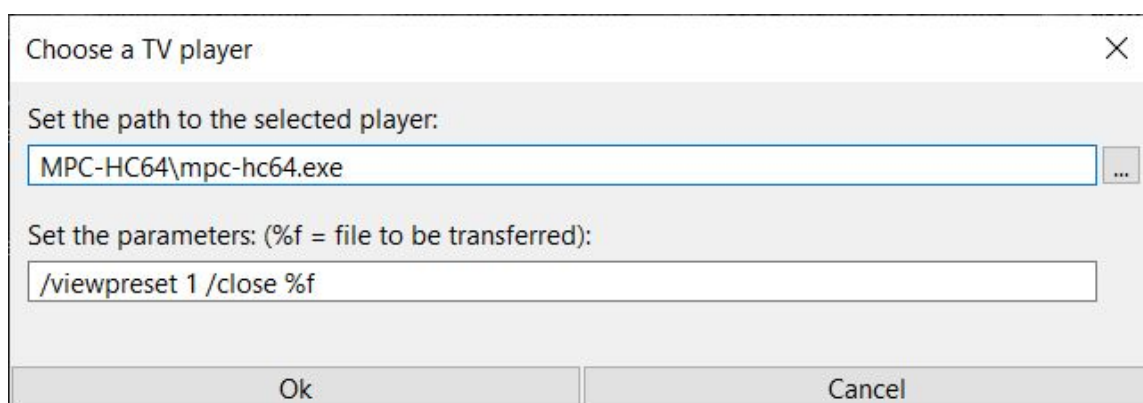
- Sort by country
- Sorting by station name
- Sorting by genre
- Sorting by country and station name
- Sorting by genre and station name
- Sorting by country, genre and station name

It is also possible to sort the list according to the column by clicking on a column heading.

Attention:

For reasons of speed, the database is always used for sorting. For this reason, it is essential to save any changes previously made to the playlist. Otherwise they will be irrevocably lost!

2.16.   *Path to the TV player (web mode)*

When watching web TV, dsmPlayer only acts as a helper and provides the station lists. The actual program for watching the TV stations is defined here, including the required options.

I recommend MPC-HC here. This program has shown the greatest stability in my tests. However, the program can of course be freely selected.

2.17.   *Show station logos (web mode)*

This item can be used to display the station logos. For speed reasons, these are not constantly downloaded from the station's specified website but are loaded from a zip file with the name "stationLogos.zip".
If the zip file is not available, standard logos for radio and TV are used.
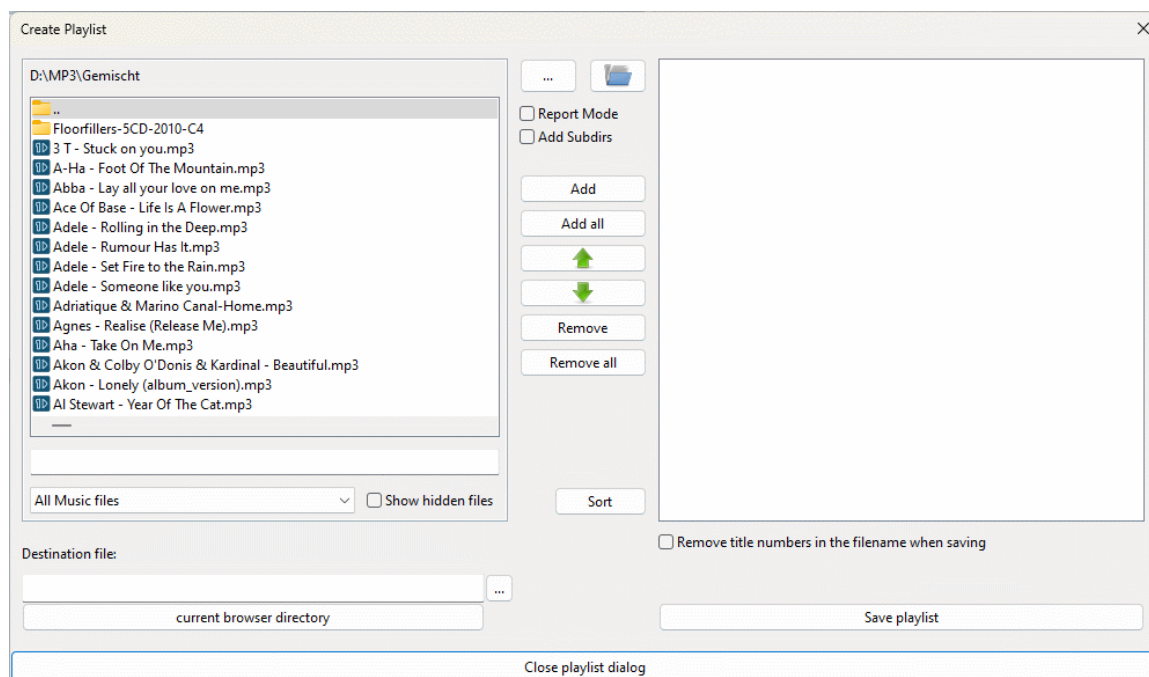
2.18.   *Transparent logos (web mode)*

If activated, the station logos have a transparent background. Otherwise, the background is displayed in white.

2.19.   *Download station logos (web mode)*

The station logos of the playlist can be downloaded here. These are then saved in a zip file with the name "stationLogos.zip".
This has the advantage of saving disk space if there are duplicate logos. If you were to assign them directly to the station in the database, more logos would be saved than necessary.

After downloading, the logos are reduced to a size of 24x24 pixels and converted into a png. This png is then saved in the zip file. This means that all logos always

have the same format, which speeds up the loading process.

2.20.   *Path to the gain program (file mode)*

The path and options for the gain program can be specified here.
You can use mp3DirectCut or another program.

The supported file formats can be entered.
In any case, the description of the program must be observed.

2.21.   *Path to mp3DirectCut (file mode)*

The path to mp3DirectCut is specified here. Otherwise, some functions will not be available.

2.22.   *Playlists...*

Here you can create or edit music playlists. At the moment only m3u playlists are supported. I think the functions are self-explanatory. Try it out.

2.23. Show file names (File mode)

If activated, the played file names are displayed in the player without having to display the entire playlist. The player is enlarged slightly for this purpose.

2.24. Read playback length (file mode)

If activated, the length of the songs will be displayed in the playlist when loading. However, this will delay the loading process somewhat.

2.25. Title mix (file mode)

Mixes up the order of the tracks.

2.26. Exit player

Exits the player and saves the configuration.

3. Key assignment

Some key assignments are preset for operation without a mouse.

Assignment system-wide:

```
Ctrl - p    -   Play
Ctrl - s    -   Stop
Ctrl - m    -   Mute
Ctrl - n    -   next track
Ctrl - b    -   previous track
Ctrl - r    -   Start/stop recording
F10         -   Hide player
F11         -   Show player
```

Assignment in the program (playlist):

```
F1          -   Bring the current track into the field of view
F4          -   Edit station (in edit mode)
F7          -   Add new station (in edit mode)
Del         -   Delete station (in edit mode)
Escape      -   Cancel selection(s)
```

4. Note:

As Phiola is currently only available in 64 bit, dsmPlayer is also only offered as a 64 bit application.

If the default setting contains radio stations that are not legally allowed to be offered, please let me know. I will then remove them from the database immediately.

5. *Disclaimer*

I have tested the program under Windows 10 and Windows 11. Nevertheless, errors may occur. If errors are found, please let me know.

This software is offered as is. Use at your own risk.
In no event shall the author (Dirk Noack) be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of or inability to use this software or documentation, even if the author has been advised of the possibility of such damages.