

SimpleSkd2019 HowTo

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SimpleSkd2019 HowTo

Introduction.

SimpleSkd2019 is a music scheduling program for making schedules/playlists for Scott Studios SS32 or JPlayer audio programs. SimpleSkd2019 is intended for music only situations like a home jukebox or a backup source for radio automation and station STL systems.

SimpleSkd2019 uses a H2 database of audio files that have been manipulated in Scott Studios TLC program to include metadata in the header of the audio file for much of the H2 database information. There are two tables in this database. The database is embedded, meaning you don't need a separate program (database server) running to use SimpleSkd2019. Resulting schedule files are plain text that can be used in either audio program without further editing. Your pc must have Java version 8 or newer installed for SimpleSkd2019 to work. All audio should be in one parent folder, with sub folders for the categories that contain the audio files. All audio files should be named SPxxxx.WAV files as produced by TLC in these sub folders. You need to use uppercase extension .WAV if using this app in Pi or Linux. [ToC](#)

Please read this completely before starting to use SimpleSkd2019.

Set up.

Because it's Java, there is no 'installation' into Windows. Simply download the SimpleSkd2019.zip file to a new folder named SimpleSkd2019. Extract the zip file to this folder.

Similarly, there's no installation into Linux. On my Raspberry Pi I have a folder made in the home directory called 'SimpleSkd2019'. Download the SimpleSkd2019.zip file to that folder and double click on that file and the XArchiver app starts. Click on the Action Menu and select Extract. A pop-up allows you to set the folder it extracts to. Select the SimpleSkd2019 folder. Leave the rest of the Extract options as they are and click on Extract at the bottom of the app. If your Pi (Linux) pc doesn't have a file association for java files, you'll need to set it up before you double click on the SimpleSkd2019.jar file. See my post at the raspberrypi.org: [Create executable of java program](#) for instructions how to associate jar file with the April 2019 version of the rPi or email me for details at philofjava@gmail.com.

The SimpleSkd2019 folder will contain three sub folders (Stations, lib and fonts) and four other files (pifmgr_20.ico, README.TXT, SimpleSkd2019 HowTo.pdf and SSkd2019.jar). The Stations folder contains 2 files, default.mv.db and default.rul, the fonts folder has 4 fonts not supplied with Java and the lib folder that has 8 files. [ToC](#)

First Use.

Use the file manager to go to the SimpleSkd2019 folder. Double click on the SimpleSkd2019.jar file to start. A pop-up will ask you to find the App Launch Station file or start a new station. Select new station, give it a name, then you will get a pop-up to close the app and relaunch it. Once restarted, the app will give you a series of pop ups to create a station configuration file, and where to select files for the database (*/Stations/stationname/DB/stationname.db.mv*) and rules (*/Stations/stationname/Rules/stationname.rul*), along with the path to the schedule folder (*/Stations/stationname/Schedule*) that were created. Click OK to the pop ups that show the paths and SimpleSkd2019 will then start with a blank database. The Edit>Song Maintenance> Edit Song Record screen is the default screen when the app launches. [ToC](#)

Descriptions.

The Menu bar at the top of all screens has the following:

File menu has three items to choose from. [ToC](#)

Change Station will only show the one station you just made in set up, but you can add stations to the app and the more station choices will be shown.

New Station lets you add another station.

Exit closes the app, saving the size and position of the app on your screen for the next time you launch it.

View menu has two items. [ToC](#)

Show All DB Records List will provide a scrollable list of your database showing everything that the Song Maintenance screen has for each song.

Show All DB Records Last Played provides a list of when that song and artist was last used in the last schedule you created. It is ordered by Artist.

Edit menu has two items. [ToC](#)

Song Maintenance has three items.

Edit Song Record is the main screen when the app launches. From there you can edit almost everything about the song in the database.

Refresh DB and Edit reloads the database and brings you to the Song Maintenance screen.

Add New Song Record gives a series of pop ups for you to manually add a song into the database. Normally, you would use importing for your library.

Rules brings you to the Rules screen where you set the criteria for selecting a song when a schedule is created.

Schedule menu has three items. [ToC](#)

Create will make a schedule for one day and make the text output file in the Stations/Schedule/OnAir folder.

Review provides a list of all available schedules by date in list on left. Click on any one to display full schedule in list on right. Schedules are not editable, but the text file can be found in the OnAir folder and edited from there.

Week at Once will make 7 day schedules so you can schedule a week in advance at once.

Automation menu has two items. [ToC](#)

Output has one item.

SS32 or jPlayer will take the currently selected schedule and make a text file in the Stations/Schedule/OnAir folder. Create or Week at Once will make the file when scheduling is finished. This can be used to make a replacement file if the text file gets deleted.

Input has two items.

Create TOC goes through your library and gets the metadata from each song file and makes a text file called SPOTDTA.asc in the Stations/*stationname* folder.

Import SpotDTA.asc uses that file to populate the database. It only adds songs not already in the database.

Help menu has two items. [ToC](#)

Help and About are informational pop-ups.

The Functions and the Different Screens:

Change Station allows you to switch to a different station database, rules and schedules. A menu of available stations is shown to click on. [ToC](#)

New Station lets you add another station. It will have its own folders, database, etc. so you can use one instance of SimpleSkd2019 for all the stations in you group as you need, or have one for you and one for the spouse. Set up is similar to when you started your first station.

[ToC](#)

Exit closes the app, saving the size and position of the app on your screen for the next time you launch it. This is the same as clicking on the red 'X' in the upper right of the window frame.

[ToC](#)

Show All DB Records List will provide a scrollable list of your database showing everything that the database fields have for each song. This list is ordered by what the last list tab was showing on the Song Maintenance screen. Double click on a tab to re-order this list. At the top of the screen the currently loaded database name is shown. From left to right this list shows a list number, Cat, Cart, Title, CD, Artist, Year, Length, Intro time, Added date, Last played, Tempo, Power, Bin and Daypart for each song record in the database. This list is not editable.

[ToC](#)

Show All DB Records Last Played provides a list of when that song and artist was last used in the last schedule you created. From left to right this list shows a list number, Artist, Title, Song Last Played and Artist Last played times. This list is ordered by Artist. This list is not editable. [ToC](#)

Edit Song Record is where you edit most of the song information. The Cat, Cart and Last Play fields are not editable. When a new song is added from Import SpotDTA.asc, defaults are used for Bin, Tempo, Power and Daypart drop down boxes. The Bin drop down has six selections to choose for this song. A bin is just a way to categorize a song for scheduling purposes. The names here only descriptive, any song can be in any Bin. These are the Bins used in setting the Rules for making schedules. Tempo (speed) has five choices, Power (strength) has three choices and Daypart has five choices. Daypart is not used at this time, all songs are assumed to be All Day no matter what has been set for a song. Click on the UPDATE button in the middle of the screen to write the changes to the database. The lists on the right show all songs in the database by either Cat & Cart number, Title or Artist. Clicking on a tab will change the list view; double clicking on a tab will re-order the lists and highlight

the last item in the lists. These lists are coordinated. A selection on any list will highlight the same song on the other two lists. Select any item in any list and the song fields will populate with that selection's database info. An additional tab named Added is disabled unless Import SpotDTA.asc has been used and new songs have been added to the database. When this is available, the other lists are not effective until the Added list has been cleared. Selecting a new song in the Added list populates the editable fields. Make any changes needed (some are defaults) and click on the UPDATE button in the middle of the screen to write the changes to the database and that entry will be removed from the Added list. When all choices have been removed, the other lists behave normally again. The Added list is not persistent, when you exit the app the list will be gone and you'll need to remember what you just added to the database in order to find it and update it using the other lists. There are arrow buttons to move to the first, last previous and next items in a list. [ToC](#)

Refresh DB and Edit reloads the database and brings you back to the Song Maintenance screen and the last list selected on the right is reordered and the last song is highlighted. [ToC](#)

Add New Song Record gives a series of pop ups for you to manually add a song into the database. Normally, you would use Import SpotDTA.asc for adding to your library. Here you need to give a Cat and Cart number that isn't being used, the database will be checked to see if it's a valid new number, and you have to input the Title and Artist for the new song. Then you'll get a mostly blank Song Maintenance screen to fill in. Click the Update button when you've finished adding the info. [ToC](#)

Rules brings you to the Rules screen where you set the criteria for selecting a song when a schedule is created. There are four rules that can be setup and used for schedules. The two list areas have tabs for all four. You build the sequence of songs to be chosen when making a schedule from which bin listed in the left area. On the right are the criteria boxes for the entire schedule. Dayparting is ignored in this version of SimpleSkd2019. Artist Separation is the time in minutes that a chosen artist needs to wait before getting chosen again. An artist solo performance is not differentiated from a duet with the same artist. Two songs with at least one artist can play back to back. Last Play Separation is the time in hours before a chosen song needs to wait before getting chosen again. This is the song by Cat and Cart file name, not the title of the song, so the same song (a cover) by a different artist can play back to back. Tempo Step and Power Step allow you to set the mood by making the music flow smoothly slow to/from fast and soft to/from hard hitting. Usually, you'll set these numbers to 1 or 2. There are only 5 Power steps and 3 Tempo steps. Any number greater than these will be accepted, and

when a schedule is created the number is used as a greater/less than qualification to choose a song. A selection of a tab on one list will change to the same tab on the other list. Instructions are on screen. [ToC](#)

Schedule> Create is how to create a schedule for one day. A pop-up will ask you confirm or change the day to schedule. On the left is a list of available schedules. Do not set a date that is the same or earlier than the last schedule date shown. Once you set the date, you select the Rule to use then click on the Create Schedule button. The list box on the right will fill with the schedule as it is made and return to the first song when it's finished. The new schedule will get listed on the left and an output file will get made in the OnAir folder that can be used with SS32 or JPlayer. The schedule list is not editable. It shows the estimated Start time, Length, Cat, Cart, Type (Bin), Title and Artist. [ToC](#)

Schedule> Review Shows a blank schedule list box. On the left is a list of available schedules. Click on an date in the list and the schedule will be displayed in the box on the right. The schedule list is not editable. It shows the estimated Start time, Length, Cat, Cart, Type (Bin), Title and Artist. [ToC](#)

Schedule> Week at Once is similar to Schedule> Create but will make 7 days of schedules at a time. On the left is a list of available schedules. Do not set a date that is the same or earlier than the last schedule date shown. Once you confirm a start date, click on the Rule to use and 7 schedules will be made. When finished, all new schedule dates will get added in the list on the left. [ToC](#)

Automation>Output>SS32 or jPlayer will take the currently selected schedule and make a text file in the Stations/Schedule/OnAir folder. Create or Week at Once will make the file when scheduling is finished. This can be used to make a replacement file if the text file gets deleted. If no date was selected in Schedule>Review, there will be a pop-up. Continue will select the review screen so you can pick a schedule to be output. [ToC](#)

Automation>Input>Create TOC presents a pop-up for you to select the Audio folder that has all the song files in it. Your library and gets scanned for the metadata from each song file and a text file called SPOTDTA.asc is made in the Stations/*stationname* folder. [ToC](#)

Automation> Input>Import SpotDTA.asc presents a pop-up for you to select that file and uses it to populate the database. It only adds songs not already in the database. Some

attributes are set to defaults when added. The Song Maintenance screen gets the Added tab activated, and all added song Cat and Cart numbers are displayed in that list. [ToC](#)

Help and About are informational pop-ups about SimpleSkd2019. [ToC](#)

Creating or adding to the database with your library of songs on hard drive.

Start by clicking on the menu for Automation, select Create TOC and follow the prompts to select your audio library location on the hard drive. After some time, the TOC will be created as the file 'SPOTDTA.ASC' in the Station folder. Now you can go to the Automation menu and select Input > Import SpotDTA.asc and your database will be populated. On the Edit>Song Maintenance screen you'll see the list on the right side with 'Added' tab selected and the category/ file names listed. This list is not persistent, meaning, once you close the app, the list is not saved. When you first set up your database and your library is large, this might seem a problem. Plus, the other lists are inactive as long as there is at least one item in the 'Added' list. This makes you select every song in the 'Added' list, make edits (there are defaults for Bin, Tempo and Power) then click the 'Update' button to save those edits and take the song off the list. When only adding a few songs, this is not much a problem. With a new database, you may want to close the app and restart. At that point the 'Added' list is empty and disabled but all the songs are still available to be updated in any of the other lists. It's your choice which way to go when you first start. When your new database is ready, you should go to Edit>Rules and look at the defaults there. They won't do much good to create a useable schedule without changing. See the section on Rules in The Functions and the Different Screens. [ToC](#)

How it works.

Each time you start the app, the root folder and other needed folder paths are found. The available screen size is determined or the last size and position of the window frame is used to place the app on your screen. Your current station is read from the ApplaunchStation.ini file in the root folder. The SimpleSkd2019.cfg file in the /Stations/*stationname* folder is read to find the database, rules and schedule paths. A backup of the database is made in the /Stations/*stationname*/DB/backup folder. The Edit Song Record screen shows with Title tab list selected and the last entry in the list selected. The editable fields will have the song info for that selection. From here you can edit any song info, display various lists, Create and Import the TOC of your songs on hard drive, and Review or Create schedules. If you resize the window frame and make it smaller, scrollbars appear to allow you to get to the corners of the frame. When you close the app, the size and position of the frame gets saved for the next time you

launch the app. When you click the UPDATE button on the Edit Song Record screen, the database is refreshed as well as all that is displayed on that screen. The data base remains unchanged unless you click the UPDATE button.

Creating a schedule starts by checking what day it is and comparing to the last available schedule. The Tempo and Power of the last song in the last schedule is retrieved. This is needed at midnight to ensure continuity of the mood. After that, which Bin is to be used next is determined, then loading a list of all songs from the database that are set to that Bin, ordering the list starting with the song that has the oldest Last Play date/time. This way all songs get the chance to play before a recent song is chosen. Then the data for first song in the Bin is read and comparisons are made in this order: Tempo, Power, Last Play separation time, and Artist separation time. When all those criteria are met, the song is chosen, the Last Play and Artist Last Play date/times are updated in the database and the song is added to the schedule list and shown in the schedule list box on the screen. When all done scheduling, the schedules are output to the OnAir folder as a text file formatted for SS32 or JPlayer. [ToC](#)

Troubleshooting.

Most of the usage has pop-ups to guide you through what is needed for normal operations. If something is missing, the error is usually trapped for you to correct. You can delete a couple of plain text files to re-configure how SimpleSkd2019 starts when launched. The App Launch Station file, named AppLaunchStation.ini in the root folder can be edited or deleted. The file is just the name of the station in your Stations folder to start the app with. The SimpleSkd2019.cfg file in the /Stations/*stationname* folder has the fully qualified pathing to the database and rules files and the schedules. If you change where these are located, simply delete this file and you'll be presented with pop-ups to locate those files the next time the app starts. This is the same as a fresh install. In the /Stations/*stationname*/DB/backup folder are up to 10 database backups that are made when you launch the app. These files are named as your database with an additional extension of a date/time stamp. If for some reason your database is unusable, you can delete the working database file in /Stations/*stationname*/DB and copy one of these files in its place, removing the date/time stamp from the name. Copy a file from the last time the app worked correctly. After 10 tries running the app, if the database does not work, none of these files will be of any use. You'll have to start over with a new station and set each song attribute to rebuild the database. [ToC](#)

Thanks for trying SimpleSkd2019. You can email me at philofjava@gmail.com with comments and such. I'll help when I can.