Scheduling Software for Music Radio

QuickStart

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The Three Legs of Successful Music Scheduling

The radio adage we learned early is: If the music's not right, nothing else matters.

Successful music radio formatting is crafted with three primary elements. First and foremost is a carefully selected library of songs gathered to attract listeners within a targeted demographic audience group. Second is the strategic plan for how frequently songs are to be repeated. For example, a Pop station may want each of its Hot Hits to play 50 times a week and its Golden Oldies to each play 15 times a month. The Third pillar is the rotation pattern for where songs will be rescheduled. If the station will be playing its Hot Hits seven times a day, the rotation scheme should prevent any of the Hot Hits from scheduling in the very same hour two days in a row Other stations may use a large library with songs with none to be scheduled more than a few times a week and a proper rotation plan should reschedule he songs equally in each dayparts so if the song schedules in the morning, it should then schedule in the afternoon, evening and overnight before repeating in morning hours.

However you format your station, MusicONE will help you fine-tune your music flow, to manage the number of plays (spins) each song will get and the placement (rotation) of each one. What it does for music, it also does for all other content; jingles, promos, bumpers, programs and voice tracks.

Switchers: If you have used another music scheduling software, the switch to Music 1 takes some mental adjustment as this one operates differently from the one you've used. Your previous scheduler was designed to produce a draft log for the day which was then hand-edited to resolve format rule violations before the final schedule was sent to the playout system. M1 can work that way, too, but it is designed for much more efficient *interactive editing,* meaning: log edits are made *during the scheduling run.* The best thing to do is to spend time learning how simple and quick it is with the video tutorials on the Music 1 Blog. You should be familiar with the gears before you begin turning them.

Newcomers: If you have not used a music scheduler before, please read this entire document and spend an hour with the tutorial videos on the M1 blog site. Music radio is a craft that can be learned. To do it well, you need to understand the basics of music formatting and song rotations.

What's the difference between a playlist and a schedule?

A playlist is a personally selected group of songs arranged in a particular sequence designed with the goal of pleasing first ourselves but, most importantly, pleasing a listener. If you are interested in music radio as a business or as a serious hobby, then you probably know how to build a good playlist by hand. Good playlists are sublime things, but they have a short lifespan. Upon hearing a playlist the third time, it begins to bore. When one senses that "this" song is going to be followed by "that" song, the pleasant surprise-effect is lost. That's why most people shuffle their own playlists, to change the song sequence. It is not nearly so simple for a radio station.

Music radio must have a new and different playlist with a totally unique sequence of songs every day. Further, the best music radio stations are always working with a relatively small song library. The songs are grouped into Categories so some get played multiple times each day and songs in other Categories are scheduled to play only a few times a week or month. Regardless of how frequently songs are repeated, none of them should be scheduled in a manner that allows a frequent, loyal listener to notice "hearing the same song(s) at the same time over and over." Music 1 allows you to plan, view and adjust the rotation patterns for each of your song Categories in advance.

As each schedule is built, the your formatting rules will be observed for such things as Artist separation, tempo flow, time-of-day restrictions or separation of songs of special, user-defined Types. We recommend you read this extended article about Artist Separation before you set yours.

The Music 1 Algorithm is Original and Unique

M1 does not require a lot of complex formatting rules to get the task done. Music 1 has been designed to spot formatting/music flow problems and quick, manual edits *during the scheduling run*. Watch the tutorial/demonstration videos to see how it all comes together.

Music 1 also schedules all station ID's, jingles, liners, promos and programs. At your option, you may import the daily advert schedule from traffic/billing software and then export a fully merged log file to your playout system.

M1 operates seamlessly with all digital automation and playout systems and across all Windows operating systems. If your automation system is capable of receiving "commands" for such things as time updates, network joins, satellite switching, etc., M1 can include those commands in the playlist files it produces for automation.

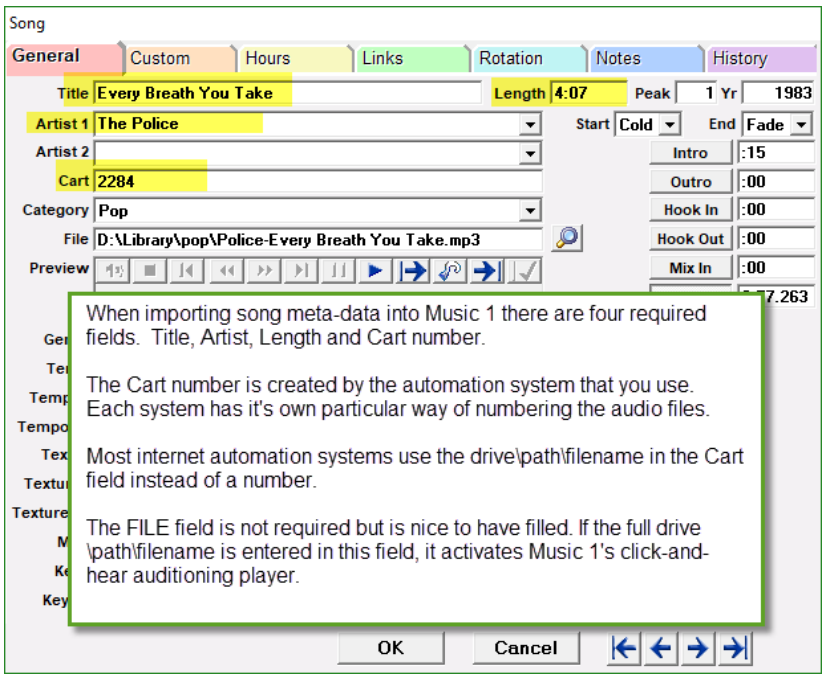
Begin With The Demonstration Videos

The primary functions are detailed in this booklet. You should spend an hour or more with the tutorial videos before you begin. The Videos are all on this page. See it in action to better understand how the parts come together.

Getting Started

Library Data Import

After you've installed Music 1, the first task is to import your library meta-data. Music 1 itself does not contain any audio, it only contains data *about* the audio files. There are four required data fields on each Music 1 song card; Title, Artist, Audio Length and the Cart numbers for each audio file. For professional automation systems the Cart number is usually just that, a number. The most widely used automation/playout systems for internet radio use the drive\path\filename in place of a cart number.



Music 1 song cards have additional, song-specific fields such as Tempo, Gender and user-defined Sound Codes that can be used to control music flow and hourly content. The cards have other informational fields for such things as Album title, Publishers, Record Label, etc. If you are importing from a text file that includes such data, it can be imported as well. If you import from audio tags (meta-data), those do not have Tempo or Gender fields, that data can be mass-updated later within Music 1. Those characteristics can be mass-applied within M1.

See videos about the various ways to import library data into Music 1

The Music 1 blog is: https://music1.pro Please bookmark the blog for quick access when you need a reference.There is a link to Importing on the home page. You may also search the word: Importing, or search on the name of your automation/playout system to find system-specific videos.

To Import Library Meta-data From Another Music Scheduler:

When you switch to Music 1 from another scheduler, you will export the library data to a text file/report. In addition to the four required fields of title, artist, length and cart number, the exported data file may include Category, tempo, gender, ending, hit year, hit month, genre, sound codes, composer, publisher, record label, ISRC, date added & total plays.

The text file can be tab- or bar-delimited, .csv (comma separated) or fixed-width (position-dependent). There are videos on the Music 1 blog showing how to import the data, but this is something we usually do at the Music 1 office as part of our setup and training service.

To Import from An Automation/Playout System

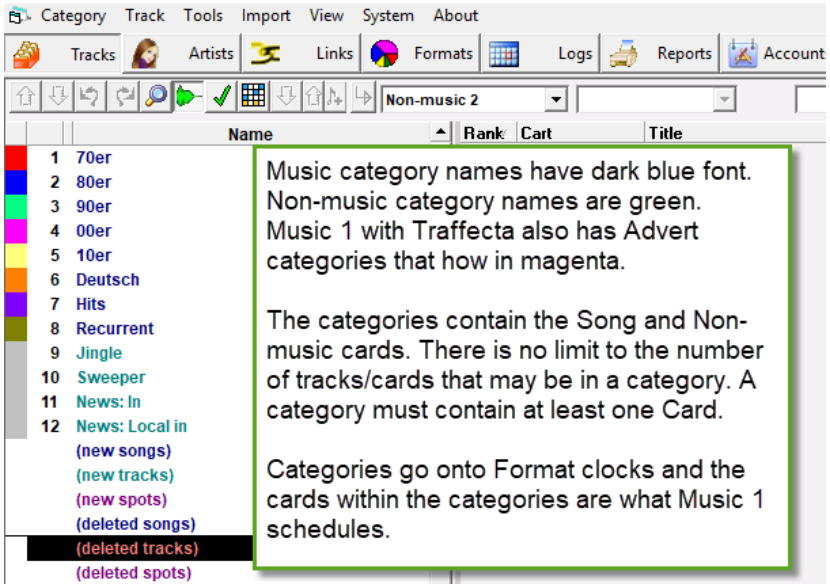
Music 1 can import data directly from many of the professional automation systems. Alternatively, all of the automation systems can export the meta-data to a text file that is readily imported into Music 1. Here again, M1 tech will assist upon your request.

To Import From .mp3 and other audio file meta-data: The widely used internet radio automation/playout systems use the drive\path\filename to find each track rather than the unique Cart numbers preferred by professional playouts. M1 can import the required data fields directly from audio file "tags". Tags are meta-data; information fields contained within the .mp3, .flac and .wma file types. Videos on the M1 blog demonstrate how to import from sound file tags.

Note: the .wav file type generally does not have meta data. Contact the M1 support office for assistance importing .wav's.

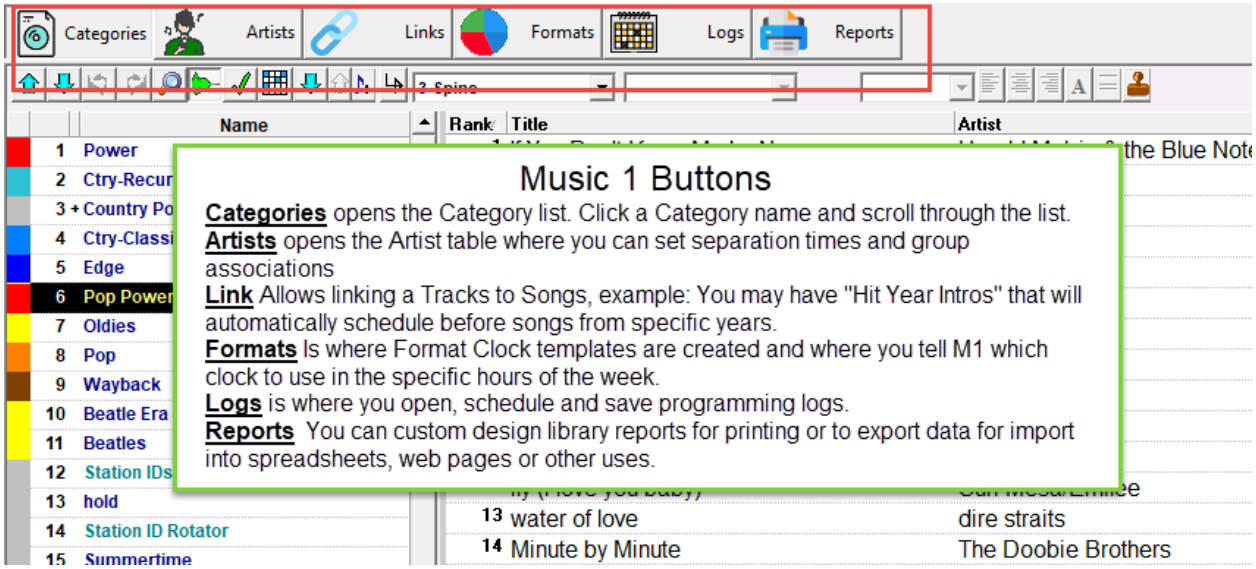
Song Cards, Non-Music Cards and Advert Cards

There are two types of audio cards in Music 1, Song cards and Non-music cards. If you also use our traffic-and-billing software, TrafficONE, there is a third type of card; a Spot (Advert) card. Each card goes into a Category of its type. Song cards can only be moved into Song Categories and Non-music cards can only be in non-music categories. If it happens that some items are imported as the wrong Type, there is a command in M1 to convert the cards from one type to the other.



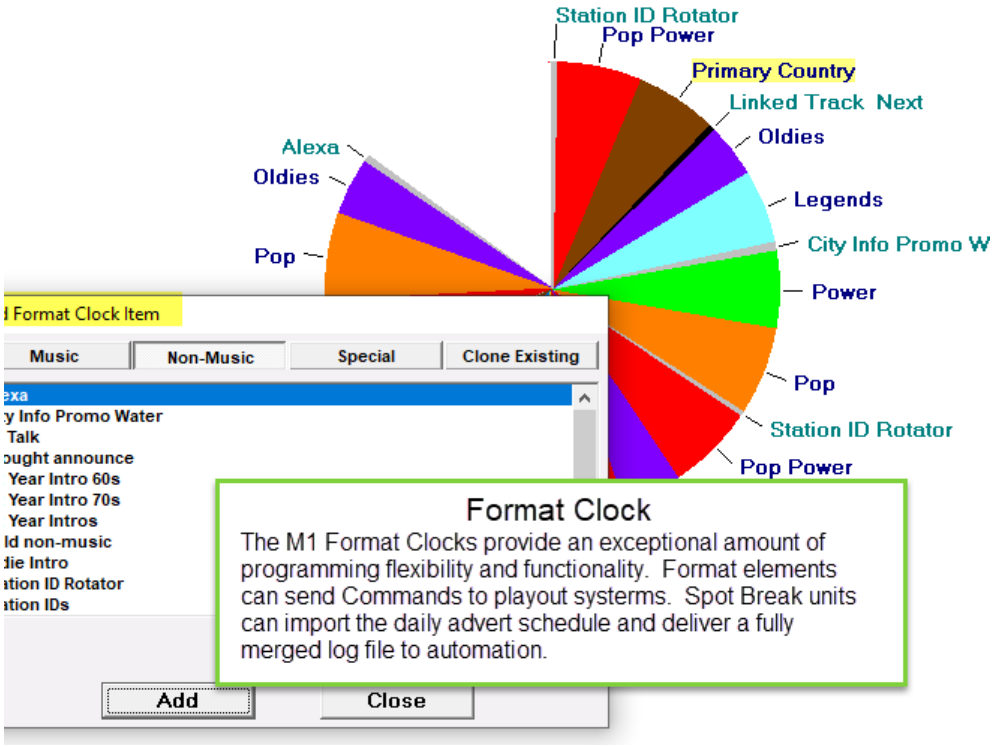
Audio cards go into Categories. Categories are rotation groups (similar to Folders) and may have any number of Cards. **Each category you create must have at least one Card in it**. Some non-music categories such as Station ID's may have just one card. You may have as many cards in a category as may need.

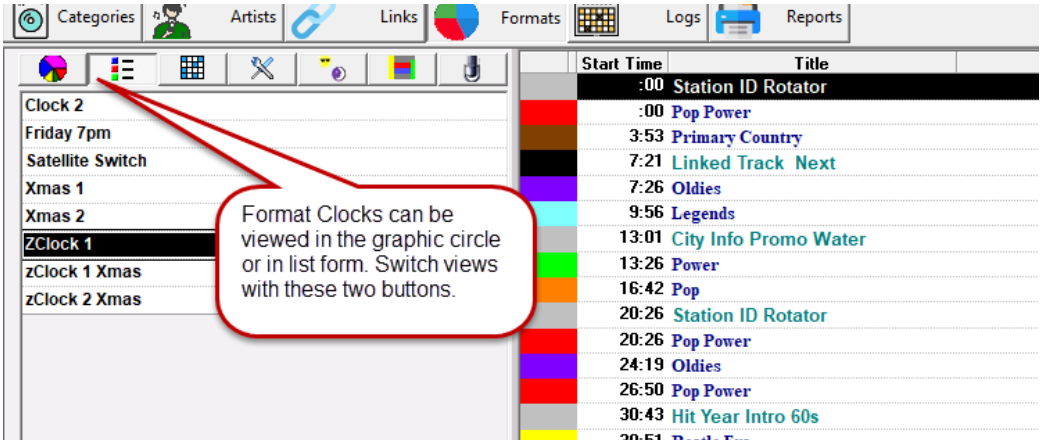
Primary Buttons



Categories Go Onto Format Clocks

Format clocks are the 'templates' for your radio station's formatting hours. On these, you construct the content and positioning of the hourly programming. One clock could be used for every hour of the day, but most stations have clocks that are daypart-specific. One clock for mornings, which might have News and Traffic reports; another clock for a "more music Midday", etc.



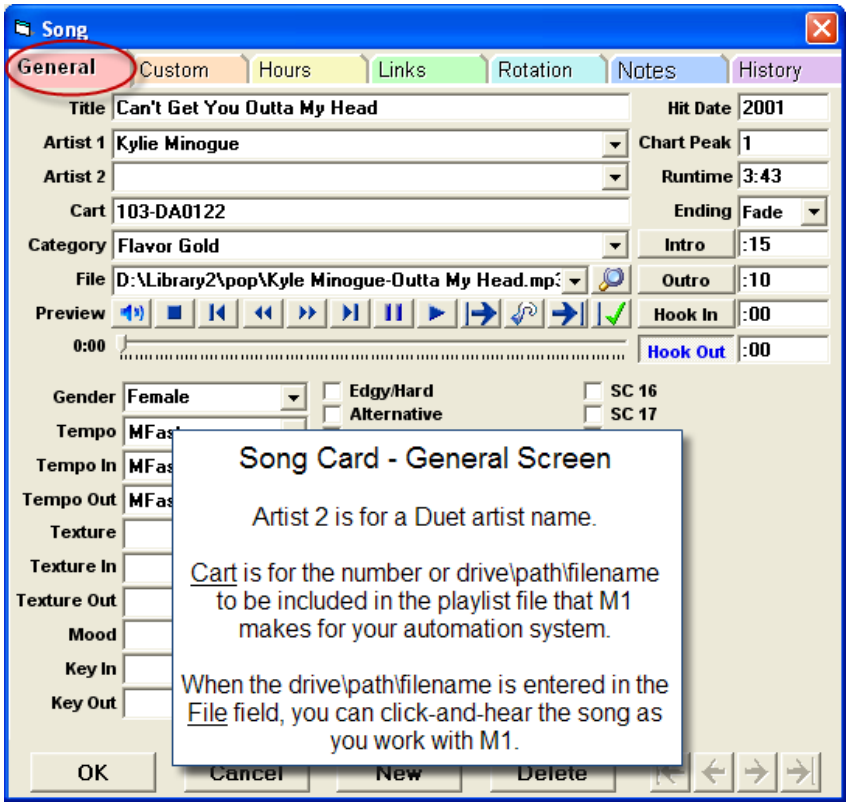


The four things that can be added to clocks are: Music categories, Non-music categories, Spot (commercial) breaks and a variety of Player Commands, depending upon the automation system used.

Spot Breaks may be used in one of two ways. Either they can import the daily advertising schedule from the traffic-and-billing software, then deliver a 'merged' playlist/schedule to the playout/automation system that includes all of the day's programming. Or, the spot break can insert a time/position marker in the finished playlist that will better enable the automation system to merge the advert schedule and the music schedule each day. (note: Music 1 SE does not have Spot breaks)

Player Commands direct an automation system to do specific things such as switching network and satellite programming feeds on and off, time updates and starting programming elements at exact times. These commands are specific and unique for each automation system.

Song Cards



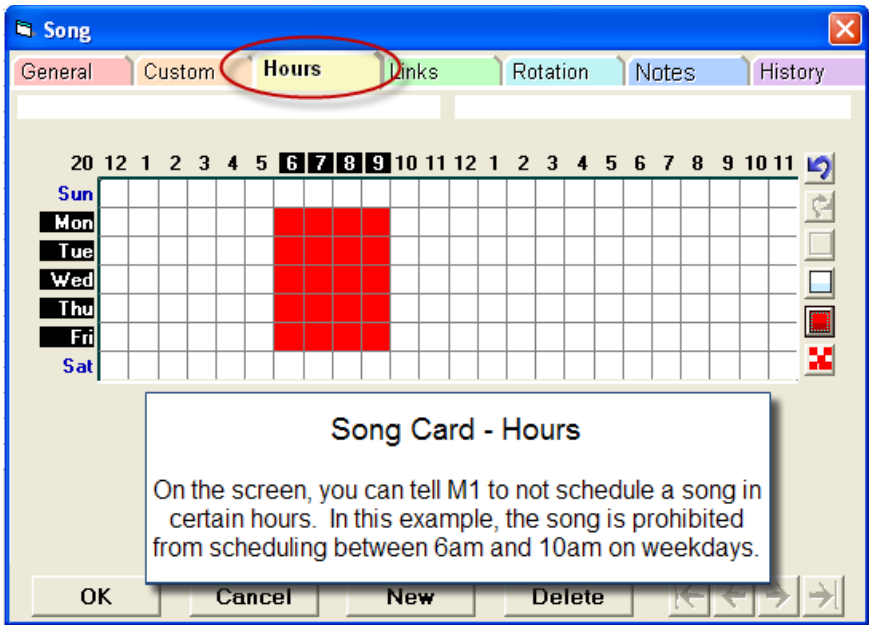
Sound Codes are user-named. These provide a way to 'type' certain songs which can then be governed in several ways. You may restrict songs with certain Sound Codes from playing in some hours. You can restrict the number of coded songs that are to be allowed in an hour. You may prevent a song with one type of Sound Code from scheduling next to a song with the same or a different Sound Code. Songs may have more than one Sound Code, too. To name Sound Codes, open: System>System Settings>Attributes>Sound Codes.

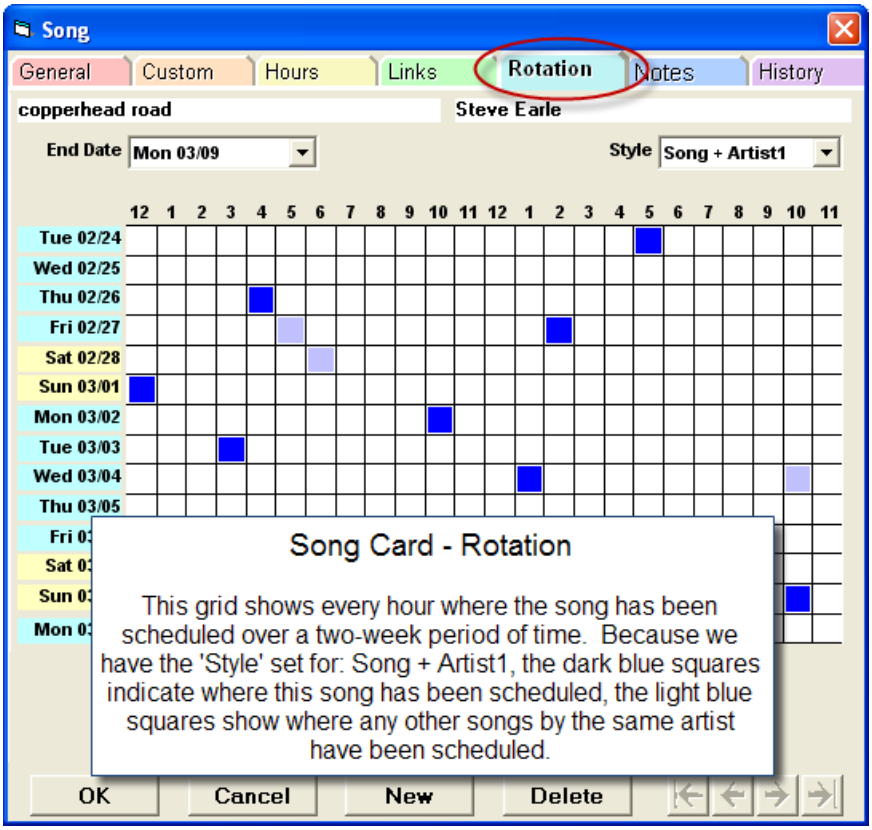
Beware of over-use. Sound Codes are useful for songs that are a minority type within your library. Best example: Most pop songs are between 3 and 4 minutes in length. A few are 5 to 7 minutes long (Hey Jude). If you create and apply a sound code named Long Song, you can instruct Music 1 to never schedule two Long Songs in an hour. Or you might specify a minimum 75 minute separation for Long Songs.

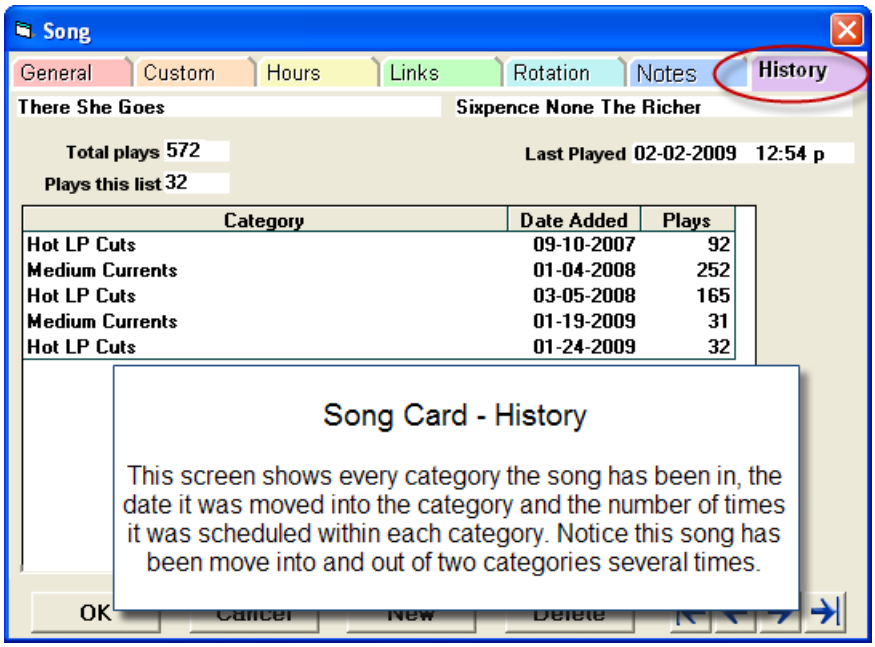
The Texture and Mood characteristics are something of a cross between Tempos and Sound codes. These two are a scale of 1 to 5 and may be useful for advanced, intricate and fully automatic scheduling in the manner of first-generation music schedulers. You can give your own Names to the Texture and Mood fields, however we recommend that you not use them until you are fully oriented and experienced with Music 1. (these characteristics are in Pro edition only.)

The Preview button is activated if the drive/path/filename for the audio file for the song is available on the computer or network. You can click-and-hear the song within M1.

Key In and Key Out fields are used by some Classical or Jazz programmers to create ear pleasing segues. For example, if you wanted to prevent a song that ends on a B-flat note from segueing into a song that begins with an A-sharp, you would use these fields.

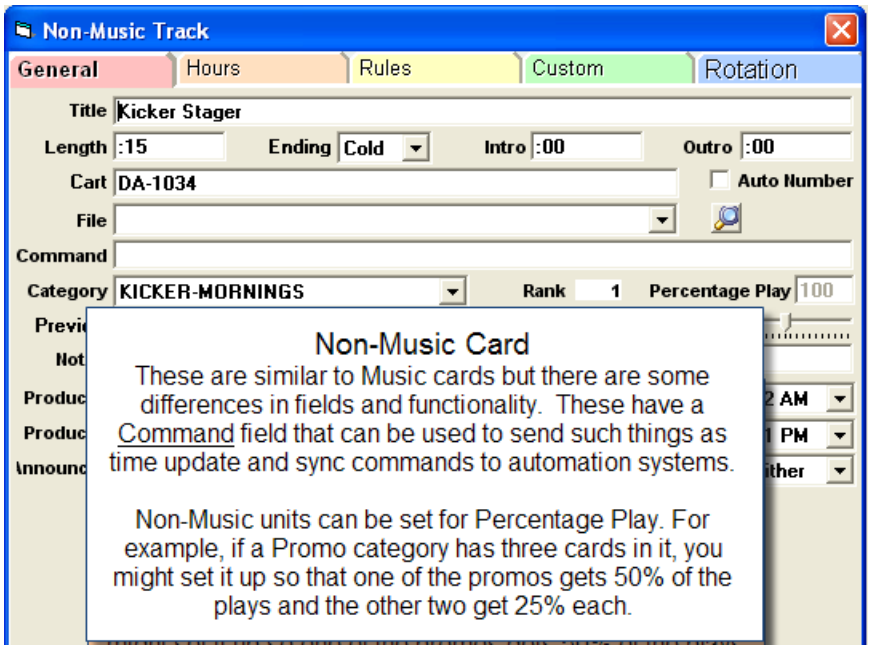






Non-Music Card

Music 1 also schedules jingles, liners, voice tracks, promos, PSAs and programs.



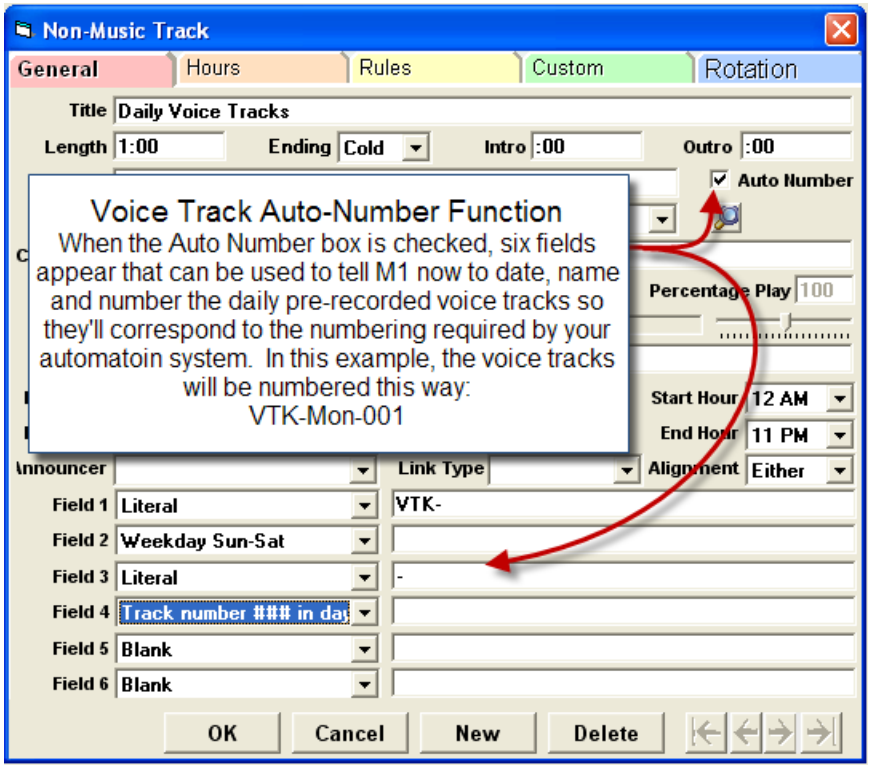
Non-music Items can be assigned user-defined special ‘product’ codes that function the same way Artists do for songs. For example, a listener supported non-commercial station might have announcements acknowledging contributors. If several law firms were supporters, a “Lawyer” product code could be created. Then M1 could be directed to separate announcements for Lawyers by a specific amount of time. (Products are in Pro edition only.)

Each unit in the category can have start and end dates. They may also have start and end hours. So, if you have promos that run on Saturday, one could be assigned to schedule only from 6am until noon, another might be assigned to schedule only from noon until 9pm.

Non Music Cards can also be Hour-restricted; prevented from scheduling in certain hours. Further, they can be assigned to ONLY schedule in certain hours.

Daily Voice Track Auto-Number Function

Music 1 has a voice tracking function which can be custom-designed to produce the specific daily voice track numbering format required by the station's digital broadcast automation system. Every professional broadcast automation/playout system does its voice track numbering in its own unique manner, and this function in Music 1 allows the software to produce exactly the type name/date/numbers required. This is a one-time definition which will not have to be changed again unless your station changes to a different automation system. In that case, the format output can quickly be altered, as needed.Videos demonstrating the Auto-Number set-up are posted on the M1 blog.



Since professional automation systems include their own voice track number/name/dating systems, they may ask for a "rotator" command. In that case, an auto-number track definition will not be required. Instead, M1 will simply put the player-specific "command" into the playlist file it delivers to the automation system.

Categories

The first consideration is: How Many Categories do you need? The barest minimum is two music categories. (You will also need non-music categories for Station ID's, Jingles, Promos

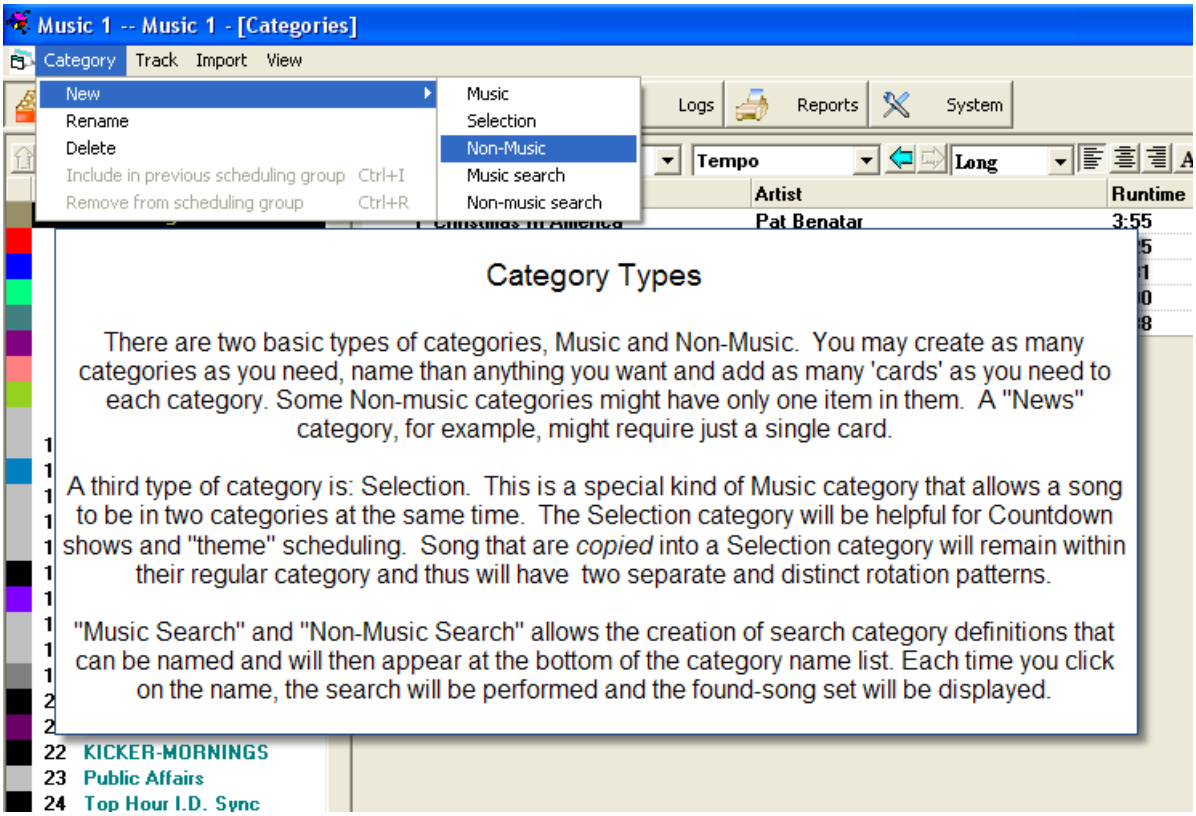
and the like.) The greatest music radio stations have always kept it simple with five to seven music categories. A typical Pop Hits type format would have these:

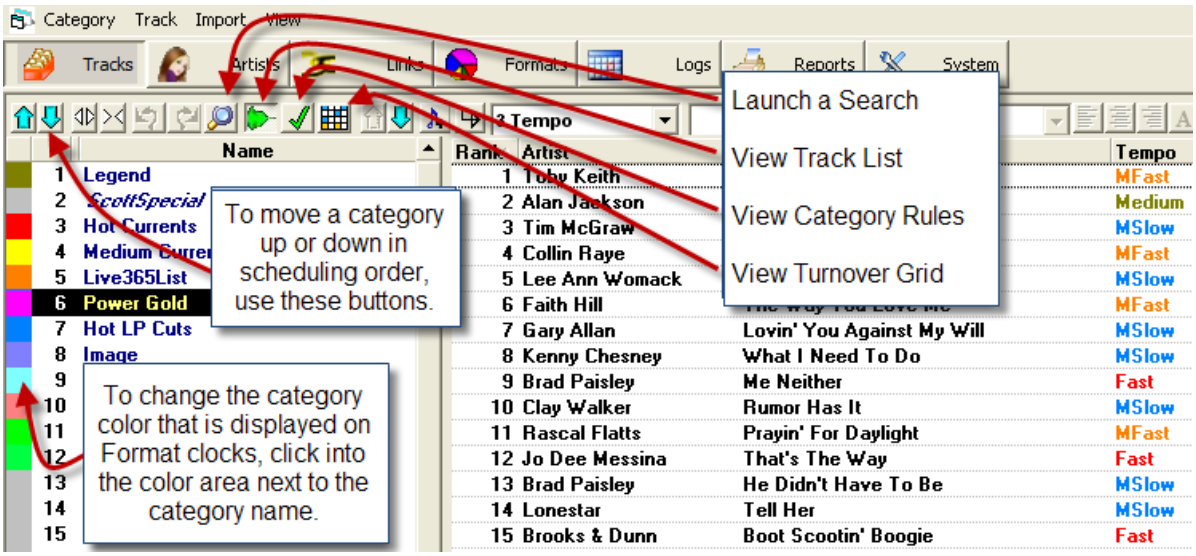
1) Hot Hits (about 10 songs)
2) Medium Hits (15 to 30 current chart songs)
3) New Adds (3 to 5 newly released songs)
4) Recurrent (Recent hits; some stations use just a few, others use dozens or even more)
5) Oldies (A few hundred to a few thousand)

Some music directors may divide the Oldies or Recurrent categories into two; one for higher rotation; one for light and/or "filler" rotation. This template works for most stations/formats, the names of the categories and the number of songs within them are entirely your decision.

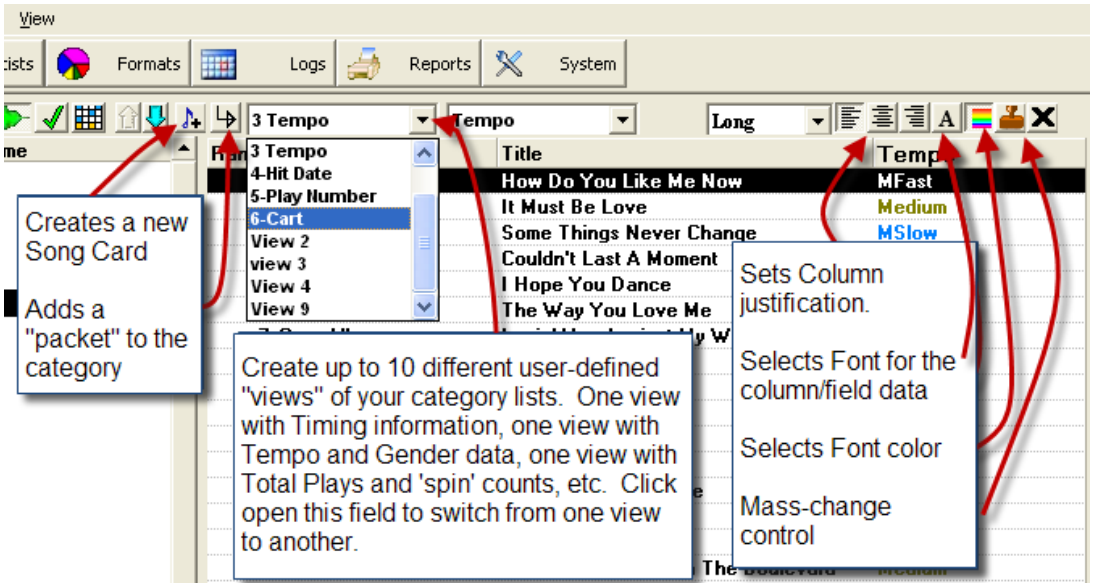
Create the fewest number of categories you feel are needed. Instead of three categories for "90s Slow", "90s Medium" and "90s Fast" songs, a single "90s Hits" category containing all of the songs from the decade will usually work just as well and would require less maintenance.

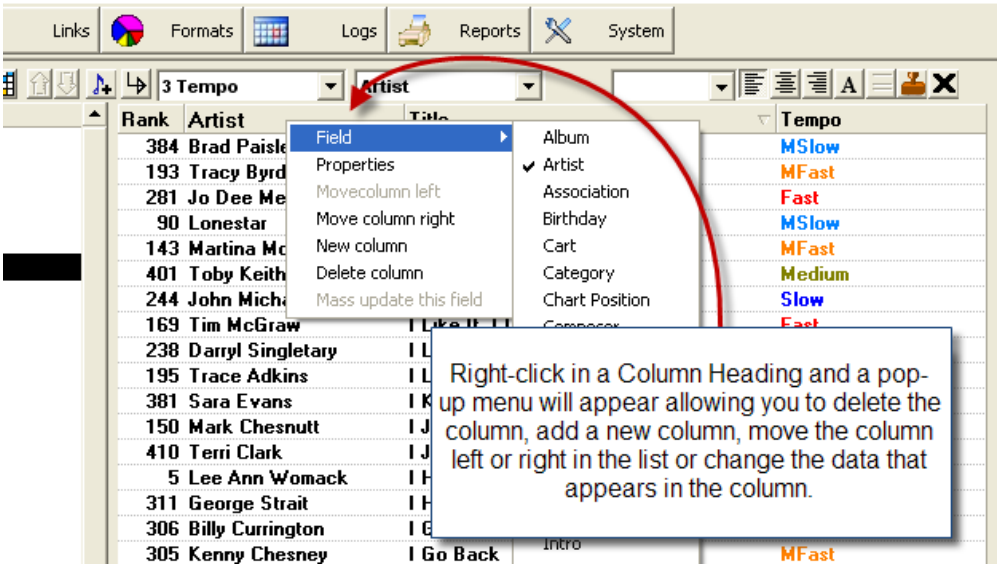
Some radio stations are "block" programmed. They feature entirely different music at different times of the day. A Music 1 user in Africa programs music in one tribal language in the morning and a different language in the afternoon. These types of stations may need double or even triple the number of categories than do typical stations . You may create as many categories as you need, just plan to create the fewest number you can get by with.
(note: Music 1 SE allows a maximum of 40 categories.)



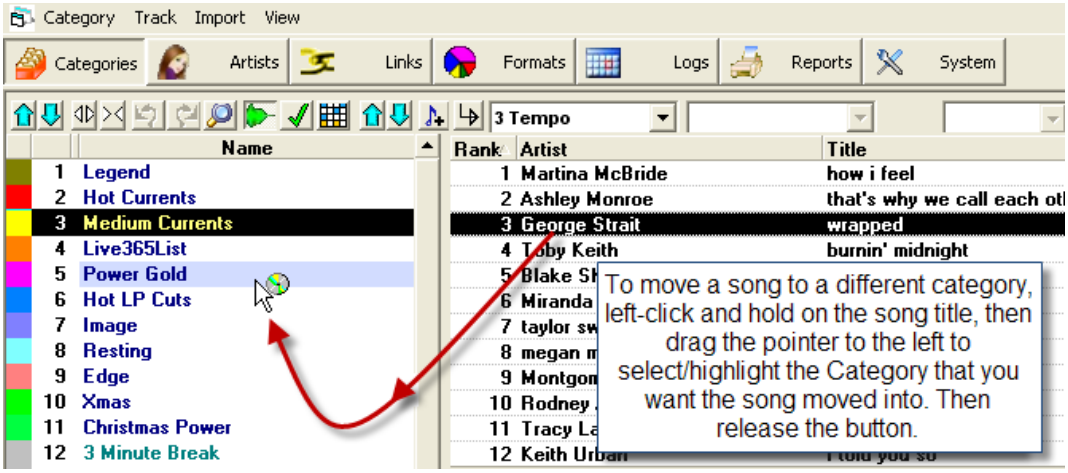


To create a new Category, Click the Tracks button to view the Category list, then open the Menu>Category, select the type you want, then give it a descriptive name. Whenever you create a new category, you must add at least one Card or unit to the category at that time. (Click the Music Note+ button for a new card.). Each category must contain at least one card. The Category goes onto the Format Clocks, but the Cards are what M1 actually 'schedules'.

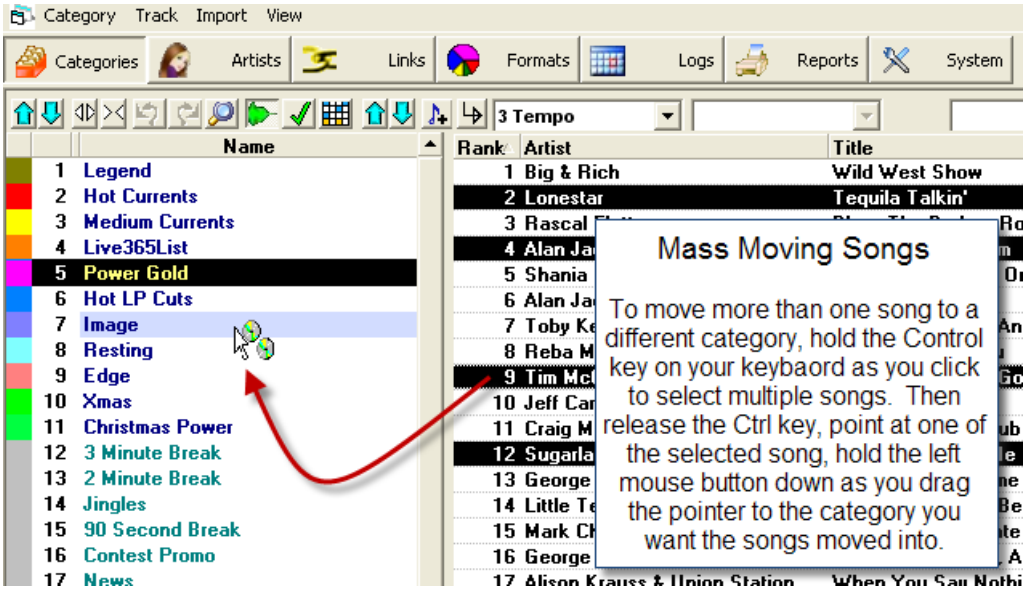

View
Formats
Logs
Reports
System
3 Tempo
Tempo
Long
3 Tempo
4-Hit Date
5-Play Number
6-Cart
View 2
view 3
View 4
View 9
Title
How Do You Like Me Now
It Must Be Love
Some Things Never Change
Couldn't Last A Moment
I Hope You Dance
The Way You Love Me
MFast
Medium
MSlow
Creates a new Song Card
Adds a "packet" to the category
Create up to 10 different user-defined "views" of your category lists. One view with Timing information, one view with Tempo and Gender data, one view with Total Plays and 'spin' counts, etc. Click open this field to switch from one view to another.
Sets Column justification.
Selects Font for the column/field data
Selects Font color
Mass-change control


Links
Formats
Logs
Reports
System
3 Tempo
Artist
Rank
Artist
Tempo
384 Brad Paisle
193 Tracy Byrd
281 Jo Dee Me
90 Lonestar
143 Martina Mc
401 Toby Keith
244 John Micha
169 Tim McGraw
238 Darryl Singletary
195 Trace Adkins
381 Sara Evans
150 Mark Chesnutt
410 Terri Clark
5 Lee Ann Womack
311 George Strait
306 Billy Currington
305 Kenny Chesney
MSlow
MFast
Fast
MSlow
MFast
Medium
Slow
Field
Properties
Movecolumn left
Move column right
New column
Delete column
Mass update this field
Album
Artist
Association
Birthday
Cart
Category
Chart Position
Right-click in a Column Heading and a pop-up menu will appear allowing you to delete the column, add a new column, move the column left or right in the list or change the data that appears in the column.

Click and Drag Song Cards to a Different Category

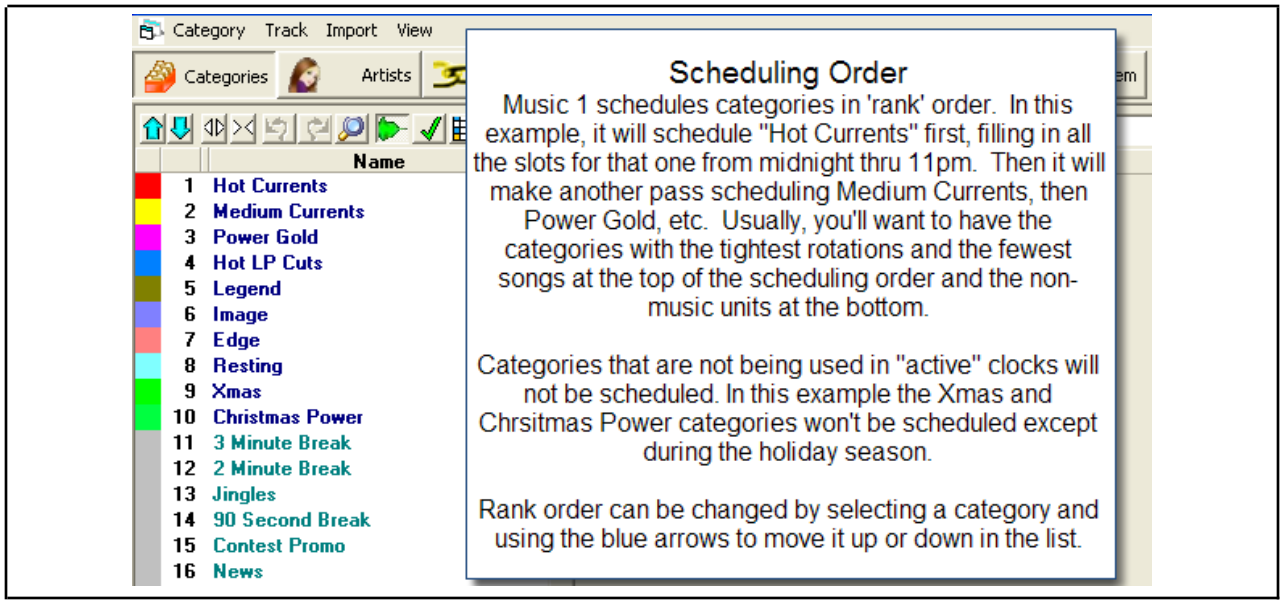


Mass-Moving Song Cards to Other Categories



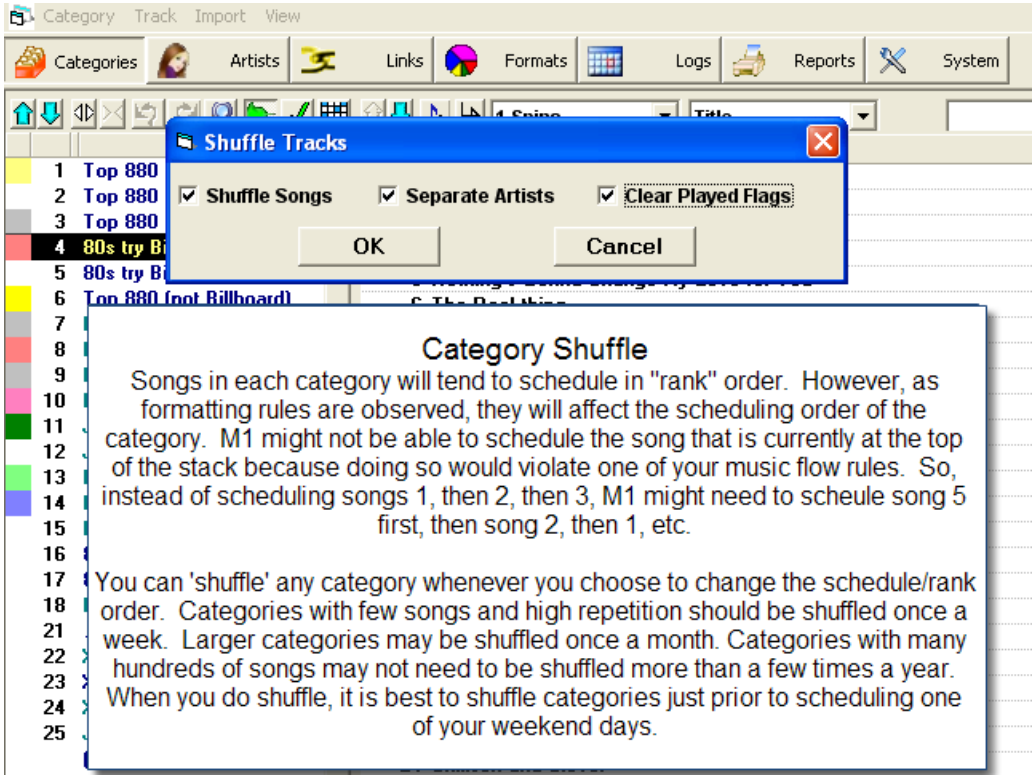
Category Scheduling Order

Music 1 schedules the Categories in Rank order. The smaller Categories should schedule before the categories containing more songs. Non-music categories should be moved to the bottom of the rank order so they will schedule in the final passes.



Category Shuffle

When library data is first imported and moved into Categories, the songs may be in Rank order alphabetically either by title or by artist. So, it is imperative that each category be shuffled before your first scheduling session.



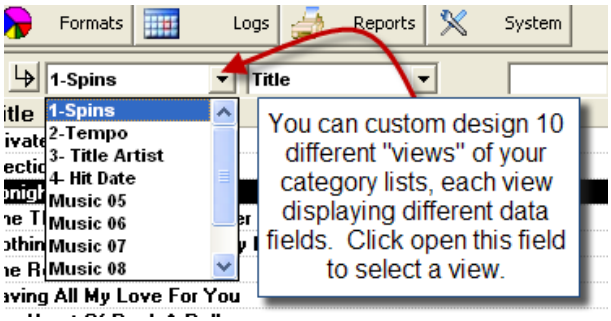
To shuffle, open the Track>Shuffle menu. Always shuffle the categories before running your first test schedules.

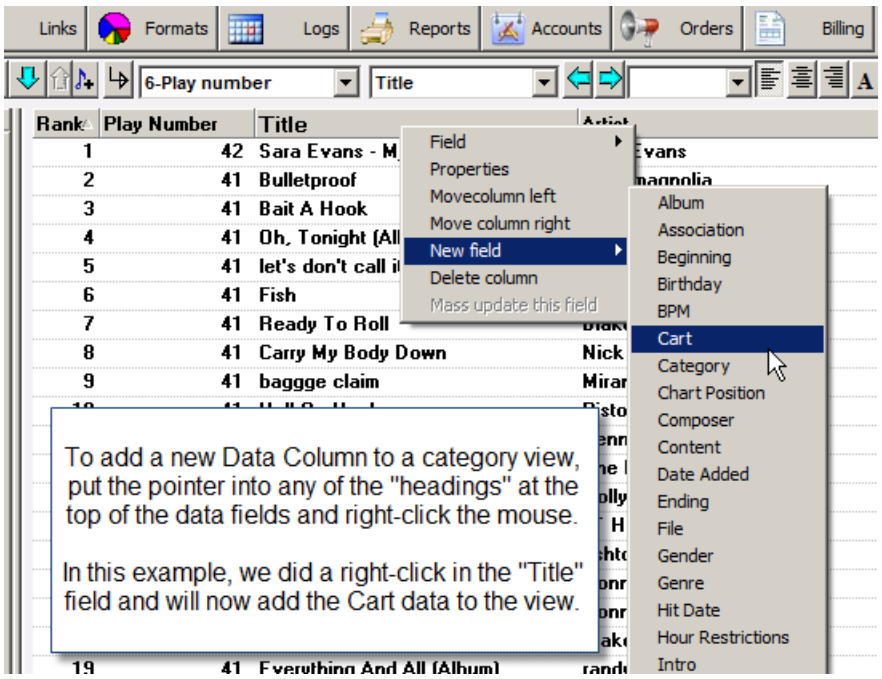
When you shuffle, it is important that the Separate Artists and Clear Played Flags boxes be checked. This will spread and separate songs by the same artists throughout the ranking.

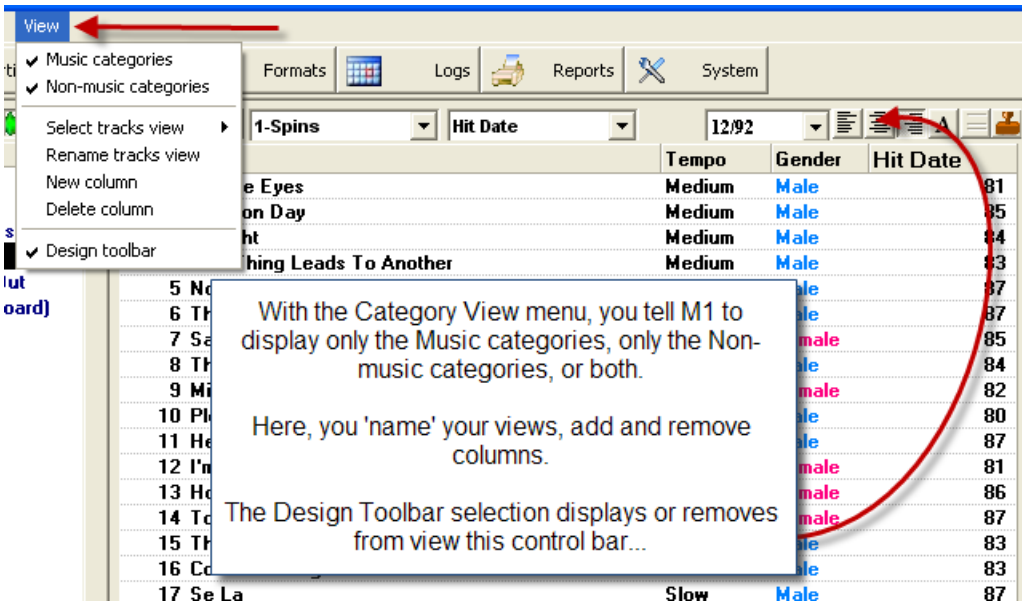
Here is an article on the M1 blog about Shuffling.

Displaying Category Lists

You can define different Category views. One view might show only the title and artist. Another, title, artist and total plays. Another title, artist, gender and tempo.







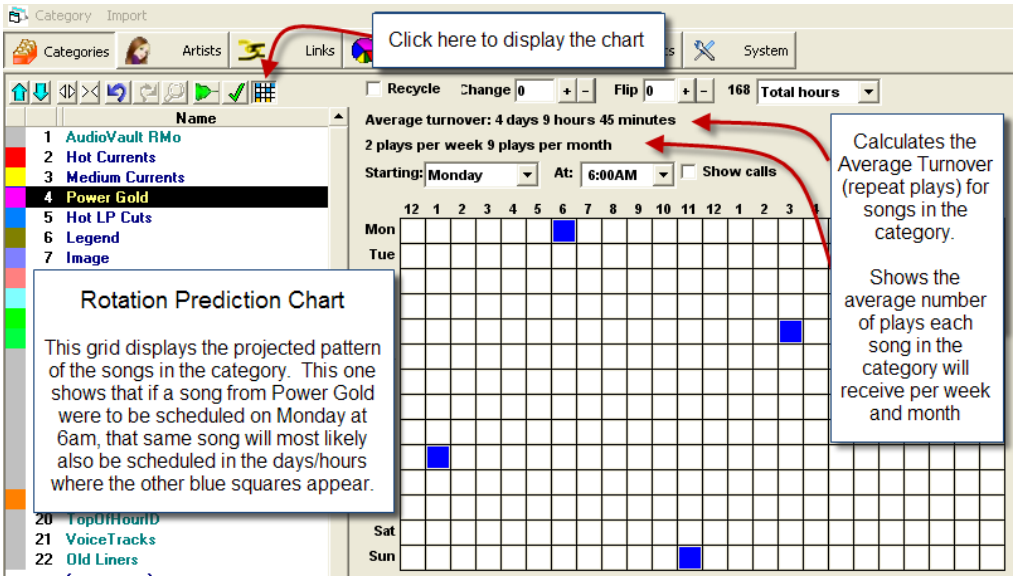
[Here is an article about designing Category Views.]

The Rotation Prediction Chart

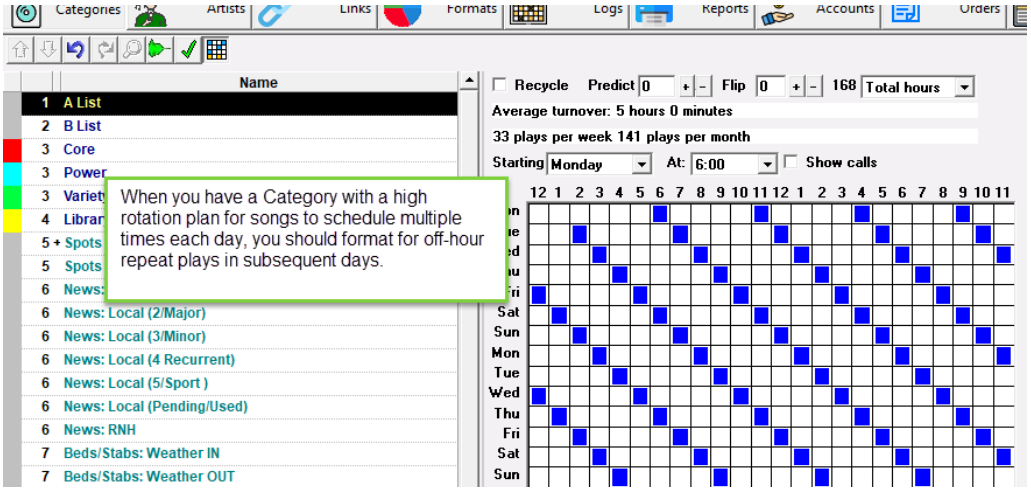
This is an important tool. It gives you a picture of what the song rotations will be within each category. Music 1 is designed to give all songs in a category the same number of plays or 'spins' over the course of the days/weeks/months. The Chart shows the rotation-repeat pattern that each/every song in the Category will have. In order to display these charts, you

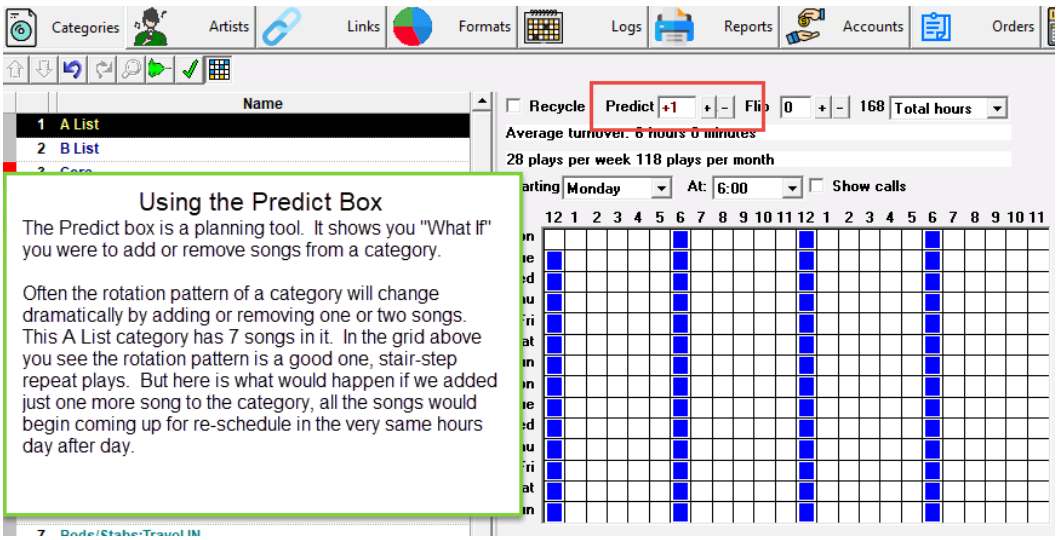
must first create format clocks and put them onto Dayformats. Then, you must install Default Dayformats on the seven days of the week. (NOTE: Music 1 SE has only one Dayformat)

Song rotations are always the end-function of a formula based on two numbers: 1) The number of songs in the Category and 2) The number of times the Category is used in the Clocks used throughout the week on your DayFormats.



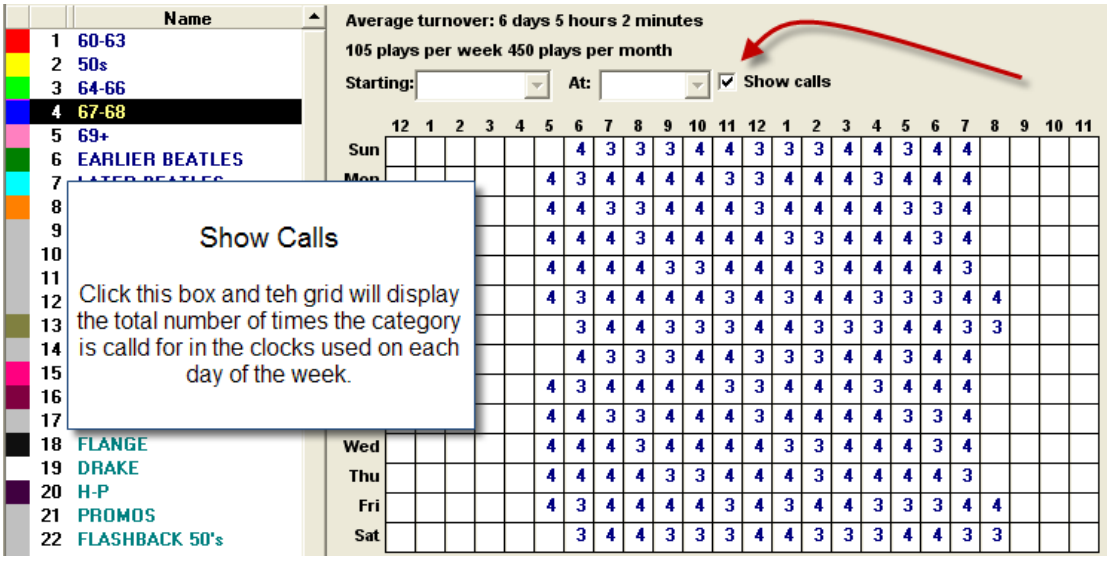
For larger categories, you will want to see a pattern showing songs will be scheduled at different times of the day, not repeating consecutively or too frequently in the same dayparts. For categories with higher rotational frequency, having songs being scheduled several times a day, you'll want to see a grid with diagonal pattern similar to this one:





The Predict box is a rotation planning tool. It shows you how the rotation and song placement within the category would change if you were to add or remove a number of songs. For example, if the Category had 18 songs in it and you did not like the look of the rotation pattern, you could click the + button once or twice, the blue squares in the Turnover grid would be adjusted to show you what the rotation pattern would be if you added one or two more songs to the category. If you clicked the minus (-) button one time, the grid would display the rotation pattern for the category if you removed one song from it. The Predict Box does not affect the rotation of the category.

The Flip box DOES alter the rotation of the category. It is useful for adjusting the rotation pattern of a Category in which you want to have a specific number of songs, thus do not want to make rotation adjustments by add or removing a few songs from the list. **Example: You** have a "Hot Current" Category. You always want exactly 9 songs in the Category, but nine songs results in the songs repeating each day at the same time, in the same hour as on the previous day. You might tell M1 to flip 2 songs before beginning each new schedule and, if so, it would offset the song placement each new day to acceptable positions.
Note: The Flip function is best applied to small categories with few songs in them. Large categories are best managed by adjusting the number of songs within the groups.



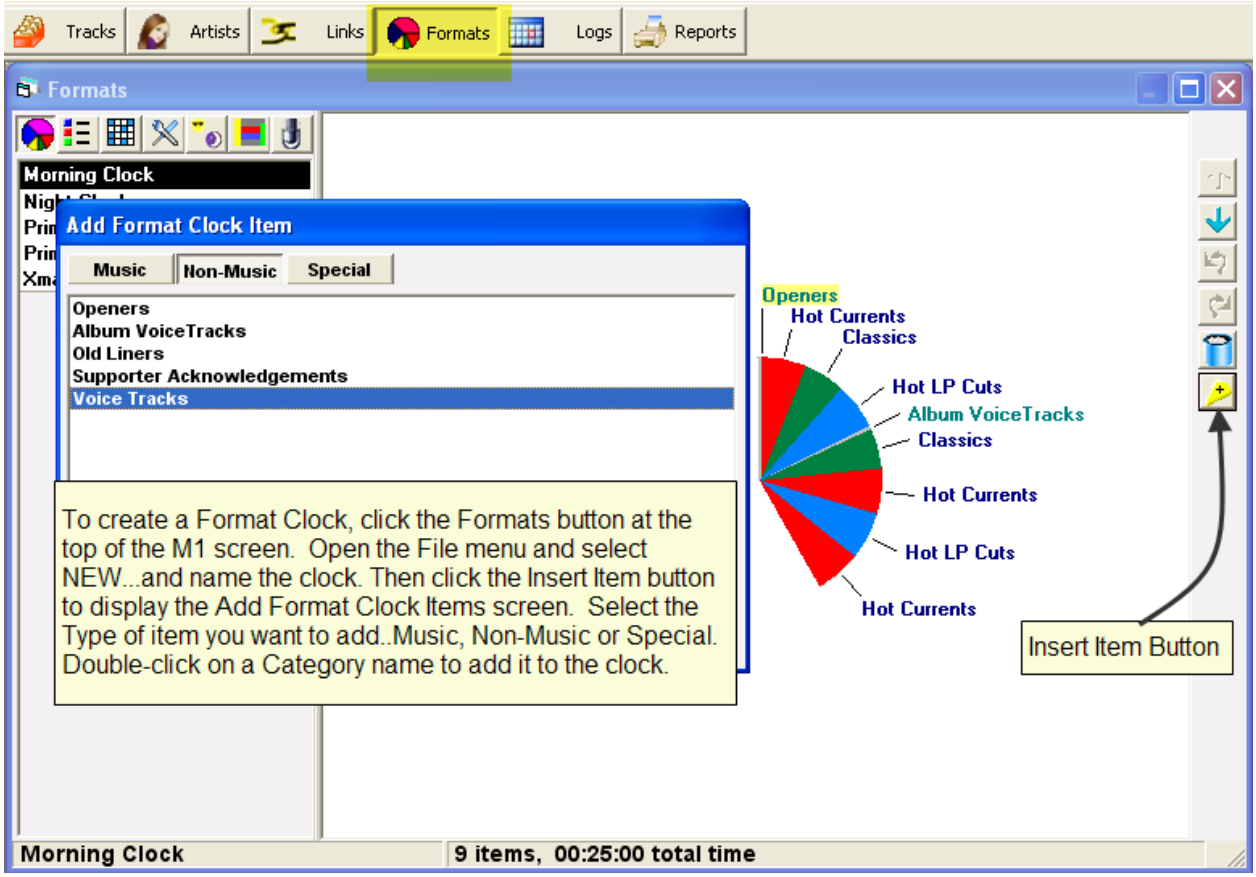
A click in the Show Calls box will change the Average Turnover Grid display. Instead of showing the blue squares which denote song rotation patterns, the boxes in the grid will have numbers indicating the number of times the category is called for in each hour where you have that category formatted.

Here is a short video demonstrating the Average Turnover chart.

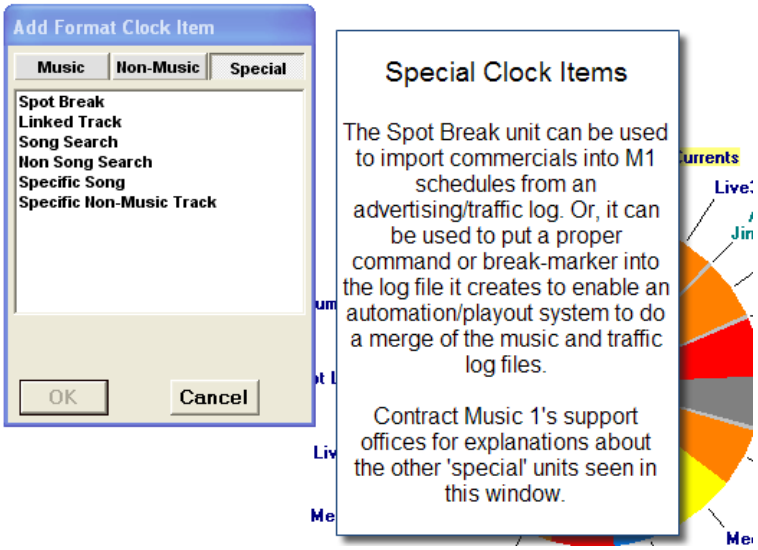
Creating Format Clocks

Before creating a clock you must have already created some Music and Non-Music Categories.And, each category must have at least one card in it with some length entered. You may create as many clocks as you need. As with Categories, fewer is usually better. Music 1 Clocks and Categories are quite versatile. A typical syndicated weekend show that is four hours and has five segments each hour can be scheduled with just one non-music category and one format clock.

Any clock may be used in hour of the Dayformats. (Note: Music 1 SE is limited to 10 clocks and one Dayformat)



To Create a clock, click the Formats button, open the File menu and select New and name your new clock. At first, the panel on the right will be empty. Click the "Insert Item" button and the "Add Format Clock Item" window will appear. Double-click on a category name and it will be added to the clock. To add Non-music units, click the Non-Music button and the list will be shown.

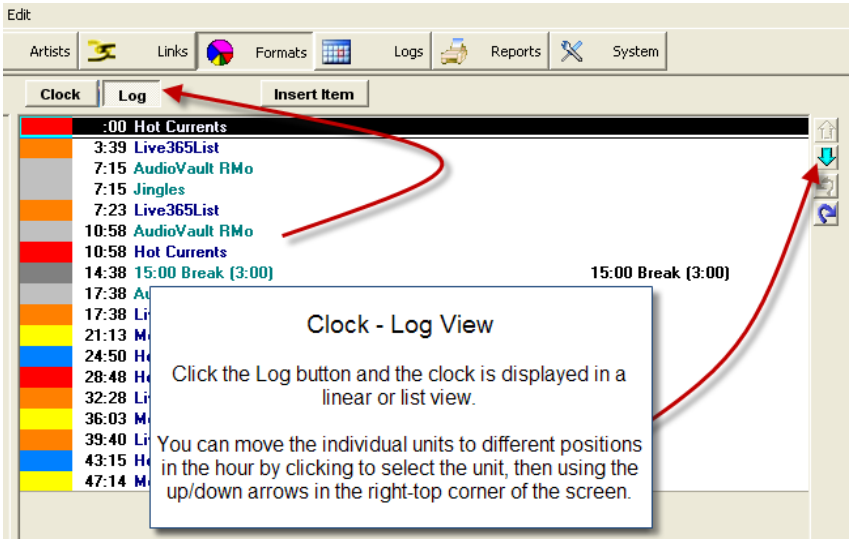


You may move back and forth between Music and Non-Music categories, adding the units in order of preference. Or, you may add the units out of order and then drag them to the desired

position. Example, if you know you are going to be scheduling three Hot Currents an hour, you can all add three, then drag the units to the desired position in the hour.

To drag units to different positions, left-click and hold on an item name. The pointer will change to become a music notes icon. Drag that over and on top of another unit name. That name will become highlighted. Release the button and the unit you are dragging will be dropped into the clock immediately before the unit you placed it on.

The size of each music category "pie-slice" will be proportionately equal to the average length of time of the items within the category. For example, if your "Hot Hits" category has 13 songs in it and the average length is 3:40, then format slice will have that size in the clock. When scheduling, each format slice will adjust to the actual length of the item scheduled there. So, when a Hot Hit is schedule with a 2:45 length, the format clock slice will shrink to that size. When a Hot Hit with a 4:12 length is scheduled, the slice will expand to that size.

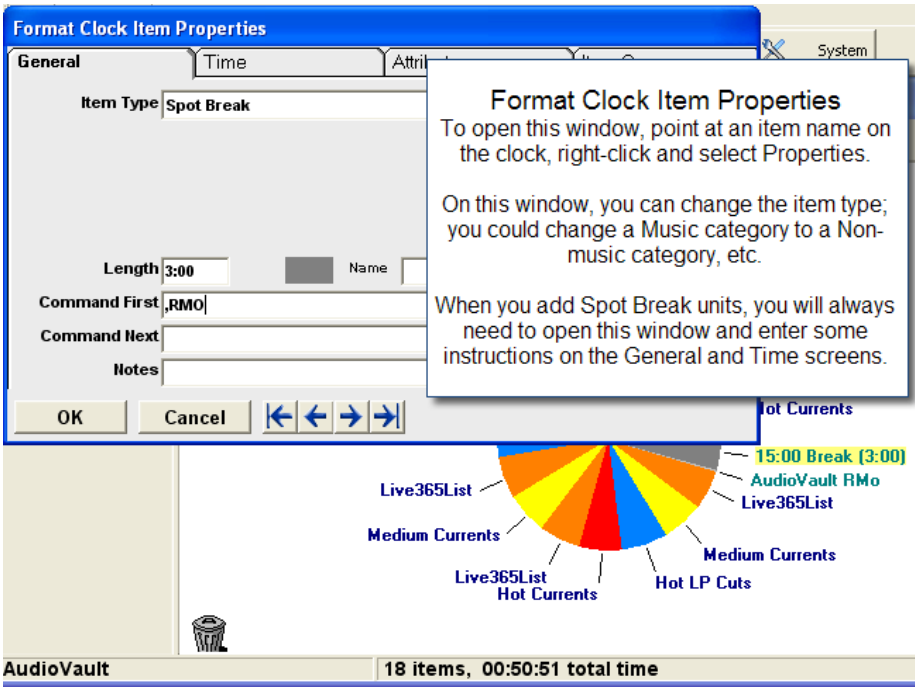


When finished adding units, click the Cancel button to put the Add Format Clock Item window away.

To delete something from the clock, drag it to the trash can/recycle icon, or right-click on the item name and click 'cut'.

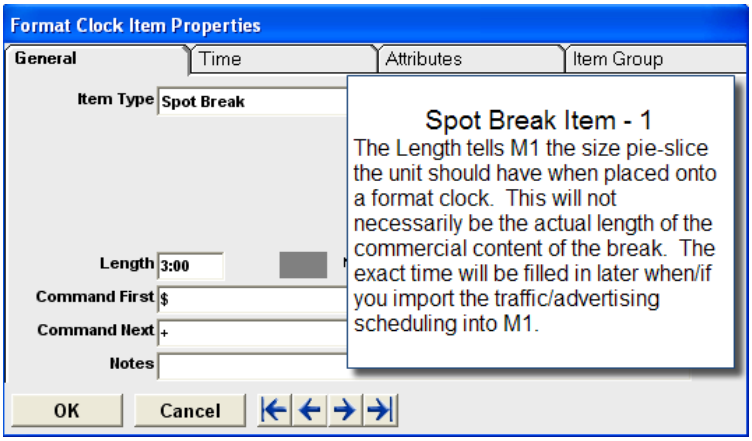
[See videos about building Clocks and Clock Rules here.]

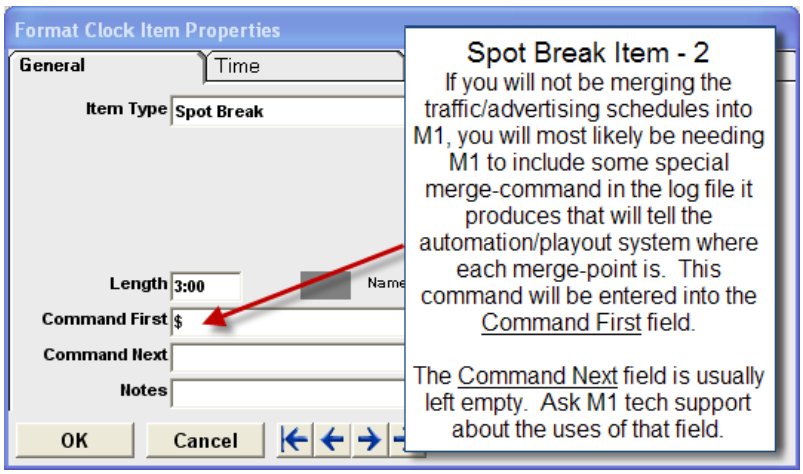
Format Clock Item Properties

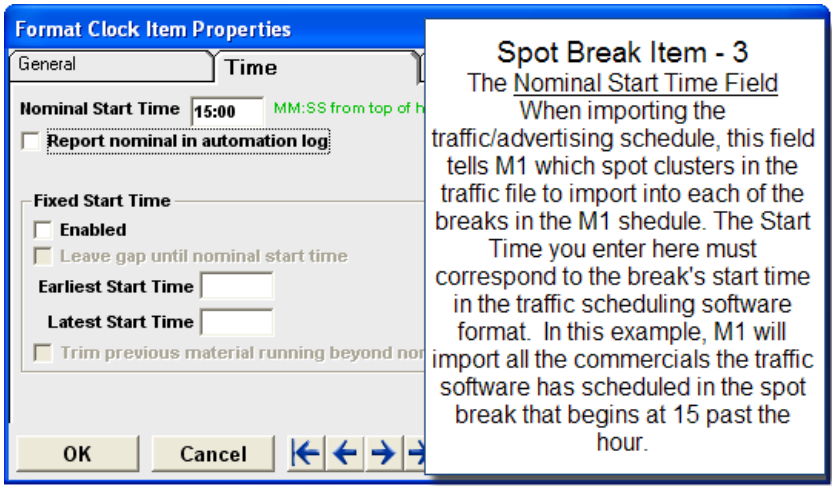


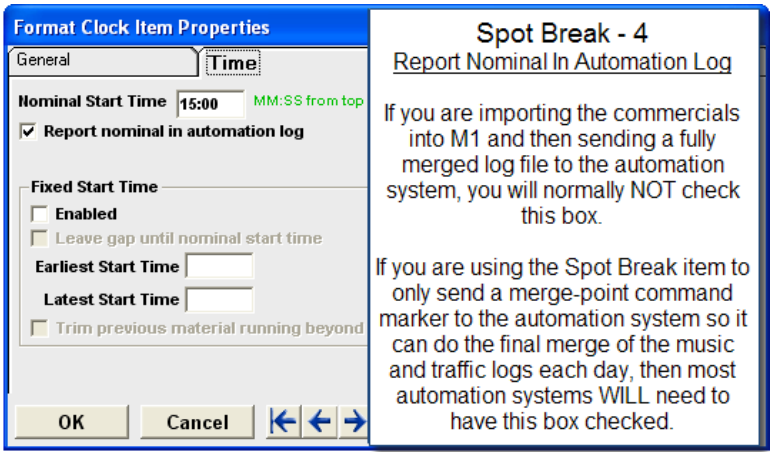
You can change or give special instructions to any item on a clock by right-clicking on the item name and selecting Properties. Right Click on an item name on a clock to see this window. You can change the selected item to one of a different type. It can be used to develop "theme" programming, such as special two-in-a-row-by-same-artist slots. A clock item can be used to create a "search" unit which will seek and schedule songs with the specific characteristics you define. Ask the Music 1 tech staff for more details about this.

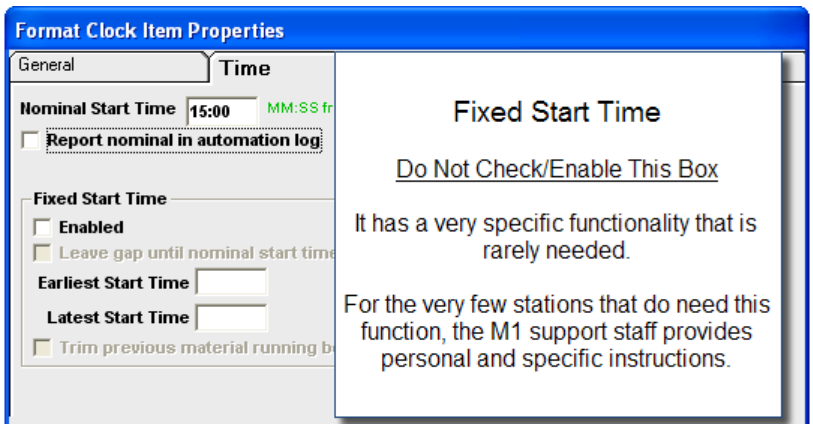
Spot Break Clock Items



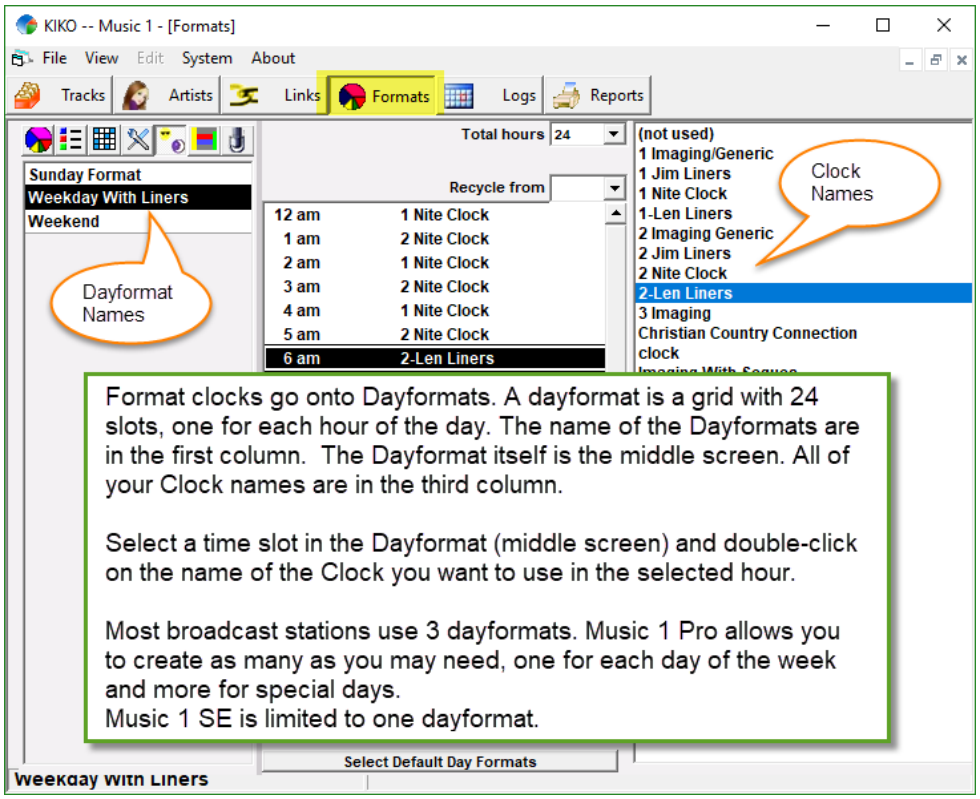

Format Clock Item Properties
General
Time
Item Type
Spot Break
Length
3:00
Command First
$
Command Next
Notes
OK
Cancel
Spot Break Item - 2
If you will not be merging the traffic/advertising schedules into M1, you will most likely be needing M1 to include some special merge-command in the log file it produces that will tell the automation/playout system where each merge-point is. This command will be entered into the Command First field.
The Command Next field is usually left empty. Ask M1 tech support about the uses of that field.


Format Clock Item Properties
General
Time
Nominal Start Time
15:00
MM:SS from top of h
Report nominal in automation log
Fixed Start Time
Enabled
Leave gap until nominal start time
Earliest Start Time
Latest Start Time
Trim previous material running beyond nor
OK
Cancel
Spot Break Item - 3
The Nominal Start Time Field
When importing the traffic/advertising schedule, this field tells M1 which spot clusters in the traffic file to import into each of the breaks in the M1 shedule. The Start Time you enter here must correspond to the break's start time in the traffic scheduling software format. In this example, M1 will import all the commercials the traffic software has scheduled in the spot break that begins at 15 past the hour.


Format Clock Item Properties
General
Time
Nominal Start Time
15:00
MM:SS from top
Report nominal in automation log
Fixed Start Time
Enabled
Leave gap until nominal start time
Earliest Start Time
Latest Start Time
Trim previous material running beyond
OK
Cancel
Spot Break - 4
Report Nominal In Automation Log
If you are importing the commercials into M1 and then sending a fully merged log file to the automation system, you will normally NOT check this box.
If you are using the Spot Break item to only send a merge-point command marker to the automation system so it can do the final merge of the music and traffic logs each day, then most automation systems WILL need to have this box checked.



DayFormats



After clocks are created, they are placed onto "DayFormats'. These are clock line-ups. Most stations have three, one for Weekdays, one for Saturday and one for Sunday. You may have as many as needed.

When you select a Dayformat in the first column, the list of 24 slots (one for each hour of the day) for the Dayformat will appear in the second column and the list of all your format clocks will appear in the third column. Select an hour-slot, then select a Clock name (fourth column) and that clock will be assigned to the selected hour slot.

Default DayFormats tell Music 1 which clock line-up (Dayformat) will normally be used on each of the seven days of the week. Each time you begin to create a new music log, M1 will

automatically select the dayfomrat for that day. You will always have the option of switching to a different DayFormat before actually loading the new log.

The Total Hours setting is used for daylight savings time adjustments. You can tell M1 to create a 23 hour log that one day in the Spring and a 25 hour log in the Fall when going off daylight saving time.

The Recycle From field is used by some stations for a special formatting technique that tells M1 to repeat-schedule the same songs that were scheduled in the over-night show beginning at a different hour of the morning. This is a category-specific function. It is rarely used. Talk with M1 Tech support before you attempt to use it.

Rules

Less is More. If you have worked with other music schedulers, you know that they require a lot of category and formatting Rules. MusicONE does not. With M1, rules are to tell the scheduler things you Don't Want To Happen.

You don't want too many of one kind of song in the hour. You don't want "this kind" of song to play next to "that kind" of song, etc. While you can set 'rule priorities', you don't really need to because in its normal scheduling/editing mode, Music 1 will not violate any of your formatting rules. So, telling M1 that 'this' rule is more important than 'that' rule, is unnecessary. It observes them all.

As you begin, you should only install the most basic rules like:

Artist Separation: We generally recommend a one- or two-hour separation on all artists. This can be changed later if need be.

Tempo Rules: Keep it simple. For a typical Pop music station, ruling out slow-to-slow song segues is usually quite enough.

Sound Code Rules: Sound codes are user-defined "types" that can be applied to Songs. For example, some pop songs have drug references. One might create a "Drug" Sound Code, then direct M1 to schedule no more than two an hour and/or to require at least fifteen minutes between plays of Drug songs.

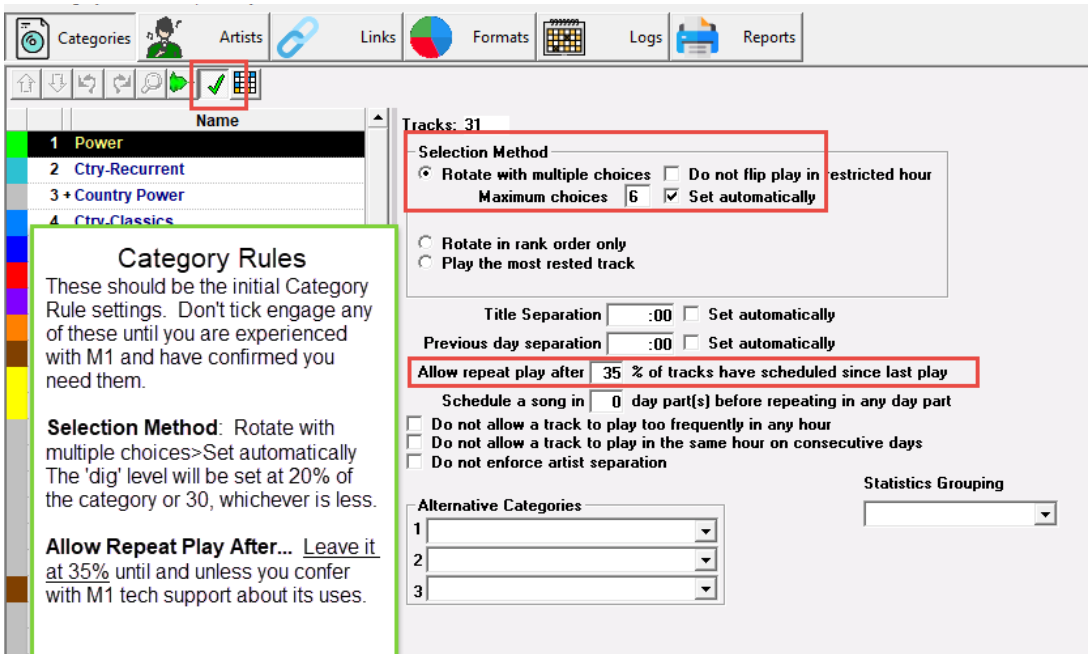
Avoid setting impossible Rules: Here's a simple example: The station's library contains 35% Slow songs. The station typically schedules 14 songs an hour.Thirty-five percent of 14 is 4.9, meaning the typical/average hour will contain five slow songs. If the music director sets a rule to allow no more than 4 Slow songs in an hour, then the scheduling pipes will immediately become clogged, backed up with Slow songs and not enough places to fit them in.

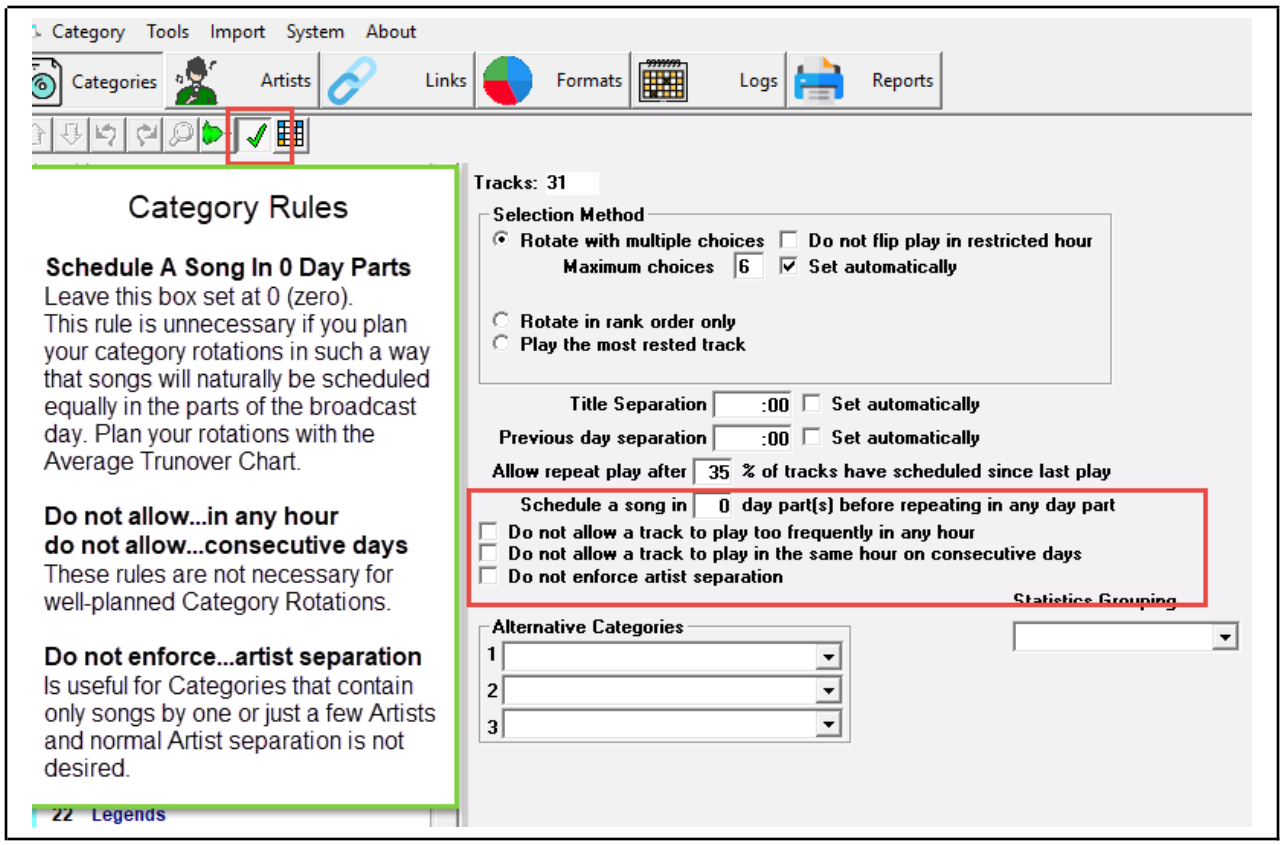
When scheduling and editing, if you see the same rule violation(s) over and over, it usually means some inefficient rule settings are in place. There are many short videos about rules, rule setting and editing on the blog.

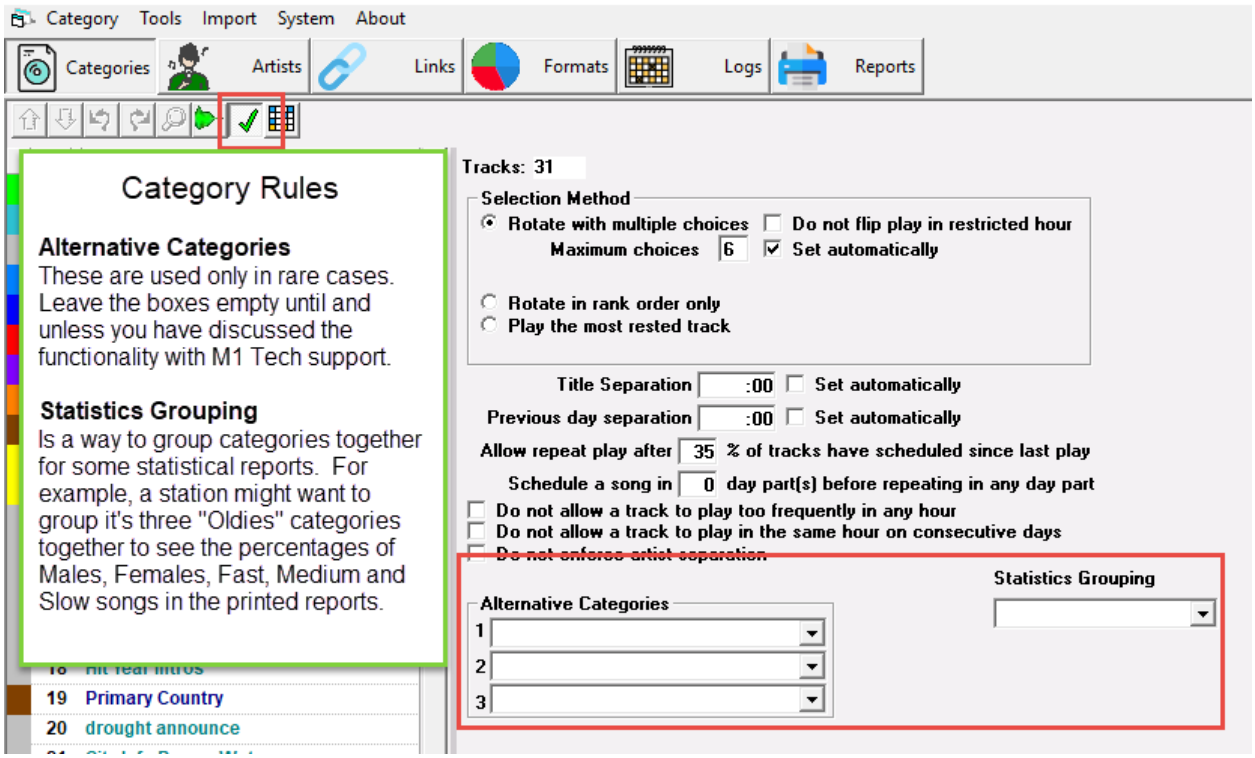
Category Rules

The "Selection Method" should be set to "Rotate with multiple choices" in almost all categories. The other option is "Rotate in rank order only." That gives M1 only one choice with each slot for the category. It tells M1 to schedule the category in 1-2-3-4-5 order only. This is useful

for “countdown” categories. Rotate With Multiple Choices allows M1 have more than one choice for each slot it fills because many times the song that is currently at the top of the card stack might violate a formatting rule for a particular slot. With multiple choices ticked, M1 can look dig farther down into the stack to find a song to fit into the slot without violating one of your formatting/music flow rules. The best thing Rotate With Multiple….and tick to have M1 set it automatically.

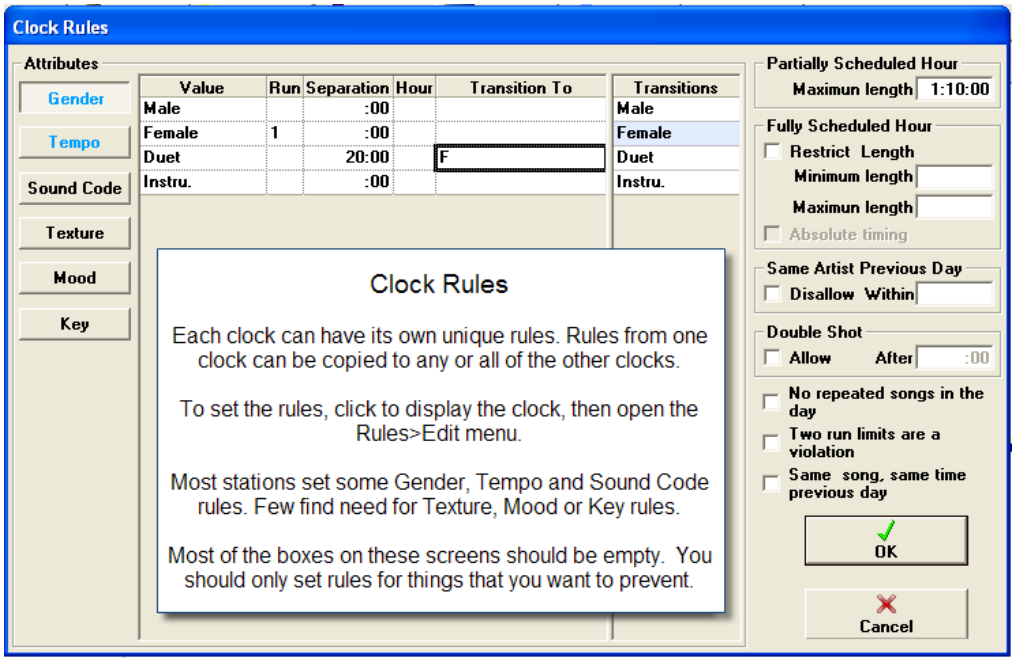


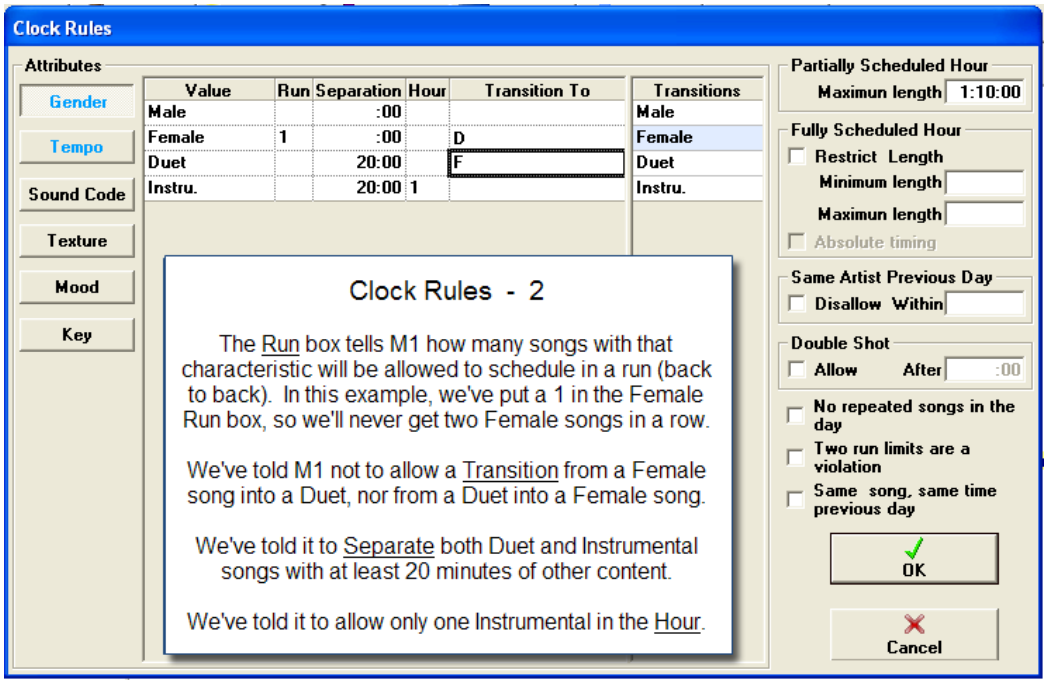

Category Tools Import System About
Categories
Artists
Links
Formats
Logs
Reports
Category Rules
Schedule A Song In 0 Day Parts
Leave this box set at 0 (zero).
This rule is unnecessary if you plan your category rotations in such a way that songs will naturally be scheduled equally in the parts of the broadcast day. Plan your rotations with the Average Trunover Chart.
Do not allow...in any hour
do not allow...consecutive days
These rules are not necessary for well-planned Category Rotations.
Do not enforce...artist separation
Is useful for Categories that contain only songs by one or just a few Artists and normal Artist separation is not desired.
22 Legends
Tracks: 31
Selection Method
Rotate with multiple choices
Do not flip play in restricted hour
Maximum choices 6
Set automatically
Rotate in rank order only
Play the most rested track
Title Separation :00 Set automatically
Previous day separation :00 Set automatically
Allow repeat play after 35 % of tracks have scheduled since last play
Schedule a song in 0 day part(s) before repeating in any day part
Do not allow a track to play too frequently in any hour
Do not allow a track to play in the same hour on consecutive days
Do not enforce artist separation
Statistics Grouping
Alternative Categories
1
2
3


Category Tools Import System About
Categories
Artists
Links
Formats
Logs
Reports
Category Rules
Alternative Categories
These are used only in rare cases. Leave the boxes empty until and unless you have discussed the functionality with M1 Tech support.
Statistics Grouping
Is a way to group categories together for some statistical reports. For example, a station might want to group it's three "Oldies" categories together to see the percentages of Males, Females, Fast, Medium and Slow songs in the printed reports.
19 Primary Country
20 drought announce
Tracks: 31
Selection Method
Rotate with multiple choices
Do not flip play in restricted hour
Maximum choices 6
Set automatically
Rotate in rank order only
Play the most rested track
Title Separation :00 Set automatically
Previous day separation :00 Set automatically
Allow repeat play after 35 % of tracks have scheduled since last play
Schedule a song in 0 day part(s) before repeating in any day part
Do not allow a track to play too frequently in any hour
Do not allow a track to play in the same hour on consecutive days
Statistics Grouping
Alternative Categories
1
2
3

Clock Rules

With a Format Clock opened on the screen, Open the Rules>Edit menu to see the Rules screens.





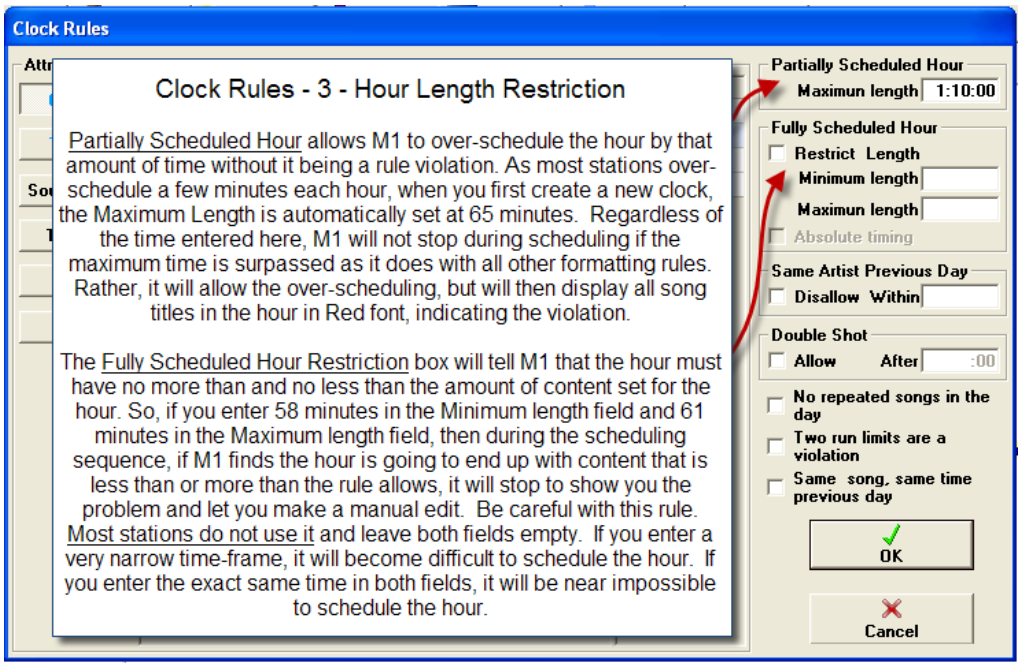
Run sets the maximum number of songs of a given type that can be played in a row (a run). A "2" in the Female Run box says it is okay to schedule two Female songs back-to-back, but M1 should not schedule more than two in a row without stopping to ask permission.

Separation tells M1 to separate songs with the characteristic with at least the entered amount of other content. So, entering 10 minutes in the Slow Separation box, tells M1 spread the Slow song by at least 10 minutes

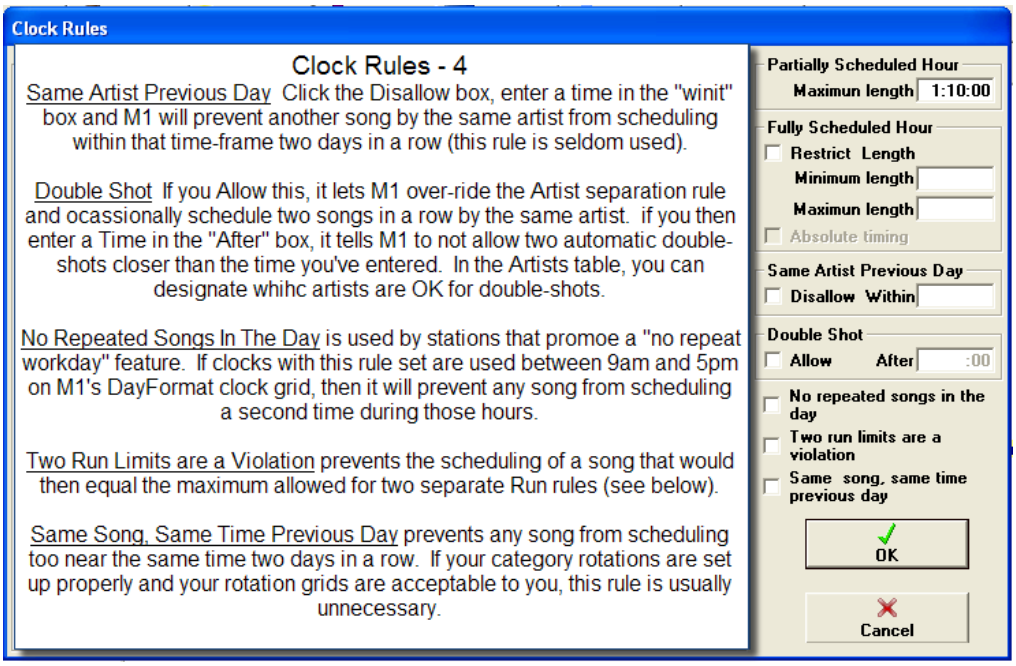
Hour limits the maximum songs to be allowed in the hour. So, a 5 in the Female Hour box tells M1 it is ok the schedule up to 5 Female songs in the hour, but no more than that.

Transitions prevents songs with certain characteristics from scheduling either before or after songs with the same, or with another characteristic. These rules are set by clicking to select the field after the characteristic in the Transition To column, then clicking the characteristic to 'prevent' in the last column. If you wanted to prevent a segue 'from" a Slow song into a Fast one, you'd have properly enter the data in the Transition To box after both the Slow and the Fast fields.

Partially Scheduled Hour Length allows you to set a maximum for an 'over-scheduled' hour. Many commercial radio programmers want to schedule an extra 'optional' song in an hour so the announcer will have it available if needed. This means they may want to schedule more than 60 minutes worth of content. The setting in this box tells M1 how much is "too much". In this example, we have it set for 1:10:00, or 70 minutes. So, M1 will allow up to that amount of content without it showing as a rules violation.



The Fully Scheduled Hour Length setting is a way to narrow the amount-of-content 'window' and makes the content setting mandatory. This is used by stations that absolutely, positively want a specific amount of content within the hour. This restriction can be problematic if used as it usually requires a "fit to time" clock search item be used in order to operate efficiently. Talk with M1 tech support before you attempt to use this restriction.



The Same Artist Previous Day rule is available if you need it. However, this is a rather unimportant consideration for most radio programmers. We do not advise using it.

No Repeated Songs In The Day is useful for stations which may promote something like “we never play the same song twice during the workday.” With this box checked, no song which plays in the hour will be allowed to schedule again in any hour where the clock is used (or other clocks with the same rule). So, if this were your “workday” clock, and you clicked this one clock into every hour from 9am until 5pm on your “workday” format, you would get a “no repeat workday” music schedule. You never want to check this box unless that is exactly what you want to happen.

Two Run Limits Are A Violaton prevents the scheduling of a song that would result in reaching the ‘maximum’ of two separate Run rules. For example, if you allowed two Female songs in a run/row and you also allow two Slow songs in a run/row, with this rule checked it would prevent the scheduling of two Slow Female songs back to back.

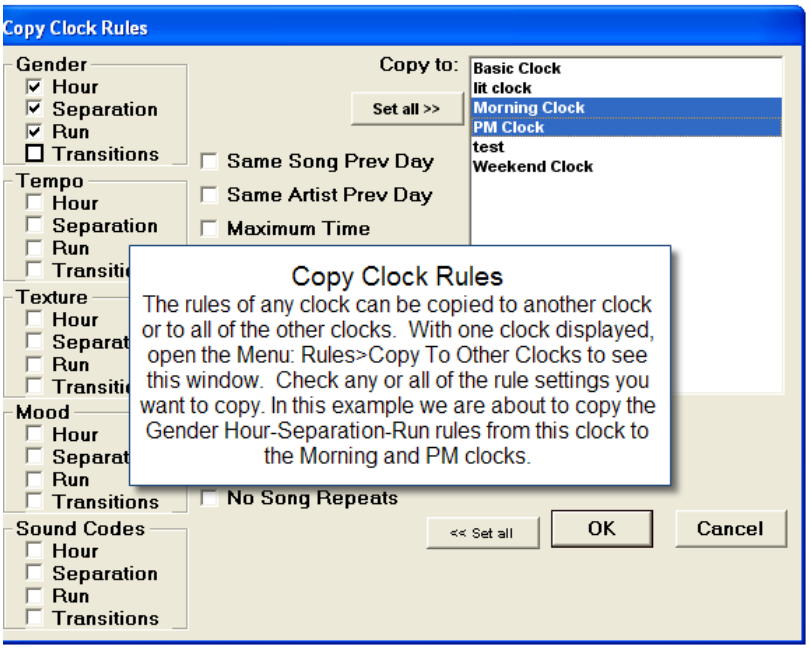
The Same Song Previous Day setting is useful for Current-music stations that are playing the current hits in high rotational frequency.Their formatting may call for many of the same songs to repeat again in the same hour on the following day. But they will want to be sure the songs do not play “too close” to the same time as where they played on the previous day. With the box check, M1 will automatically calculate and apply the maximum separation possible for each rotation group.

Copy Clock Rules

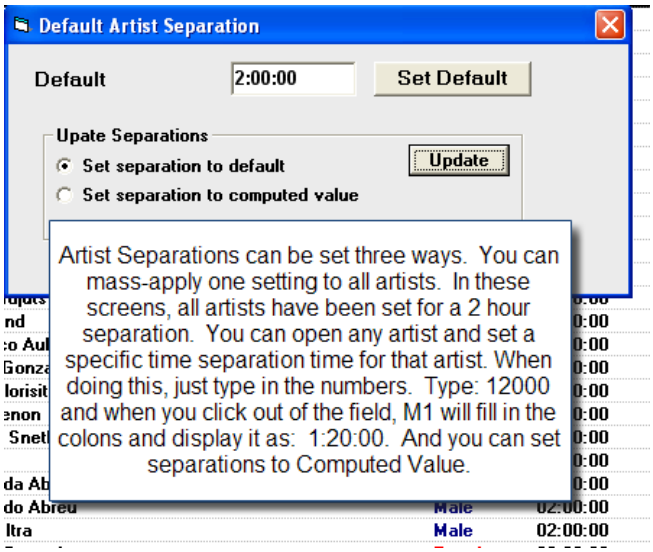
Any one or all of all rules from one clock may be copied to any other clock, or to all the other clocks. Since most of your rule settings will be universal, you do not need to enter all the settings each time you create a new clock. Open a clock with has the proper rule settings, then open the Rules>Copy To Other Clocks menu.

Check the individual rules that you want to copy, or click the Set All button at the bottom of the screen to select all the rules within the Clock. Next either click the Set All button at the top

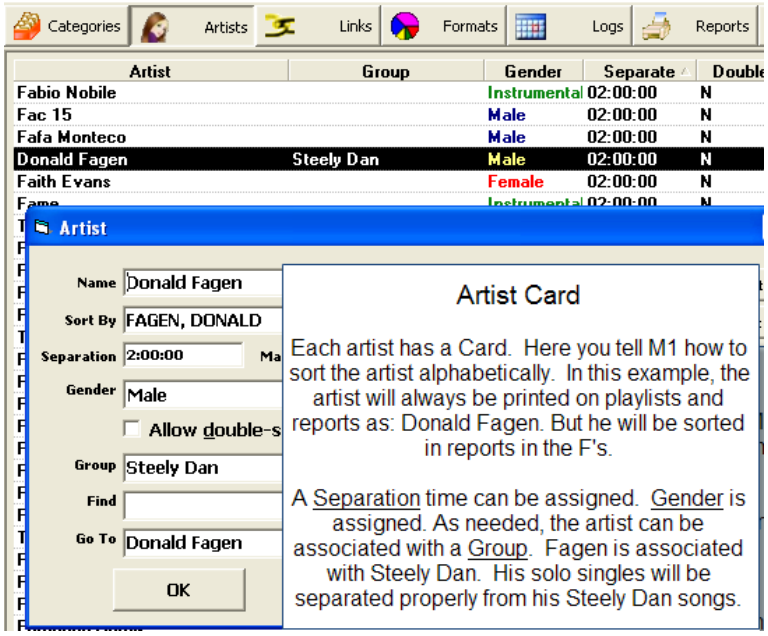
of the screen to select all the other clocks, or click individual clocks to select them. Then click the OK button and the rules will be copied to the selected clocks.

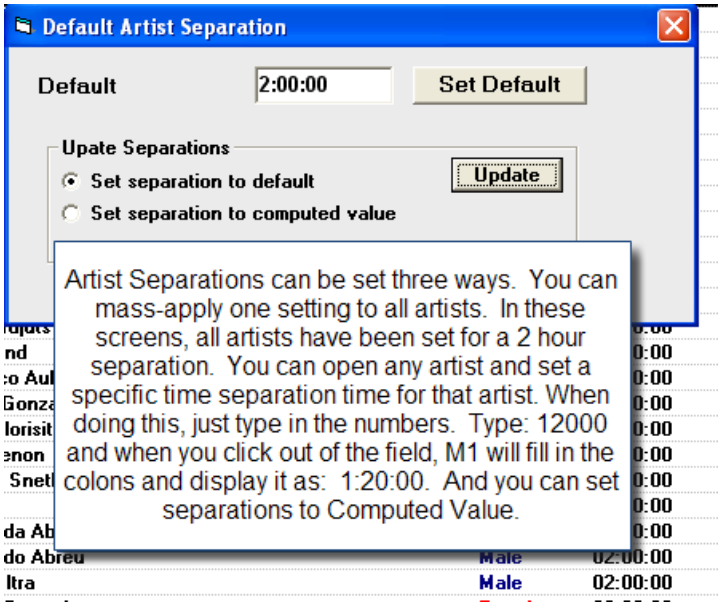


Artist and Artist Separation Rules



Double-click on an Artist name to open the Card for that artist. There you can set the Default Gender, Separation times, Group association and your alphabetical preferences.





Artist Separations By Computed Value: Each artist may have his/her own individual separation setting. You may also apply one 'universal' setting to all artists. Additionally, you may ask M1 to compute maximum separations for artists. This command is found under the Edit menu when viewing the Artist lists.

If you choose to set separations by the computed value, then M1 will calculate the number of songs by each artist in your active categories. Song in "hold" or "resting" categories will not be included in the calculation.. M1 will examine the number of times songs by each artist would normally be scheduled and then apply the average attainable separation that is possible or 2 hours, whichever is less.

Some people are quite surprised by the results of the calculated separation for some of their artists and may then manually adjust it to a higher number. They then begin seeing a lot of

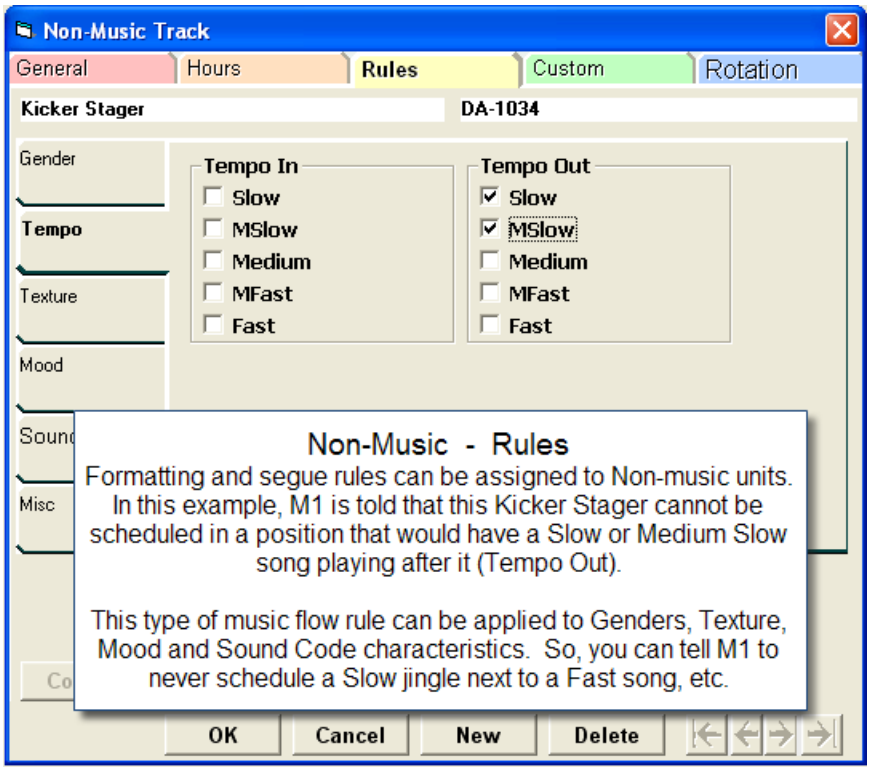
"stops" during scheduling as M1 encounters many, frequent artist separation problems. Oftentimes, the solution to the problem is to create category 'packets' for some artits.

The Maximum Artist Separation that can be set is 6 hours.

Here are videos about Artist separation and grouping.

Non-Music Item Rules

Non-Music items can have additional rules to control placement and flow.

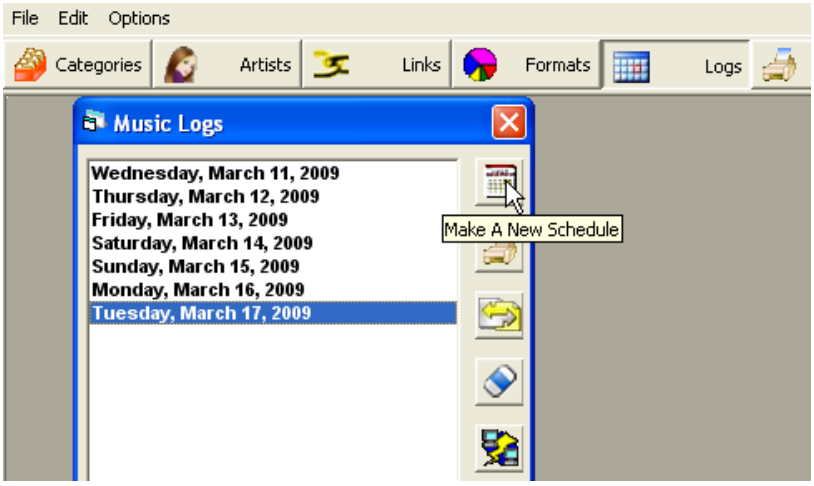


Ready To Schedule

Before you schedule your first log/playlist with Music 1 you must:

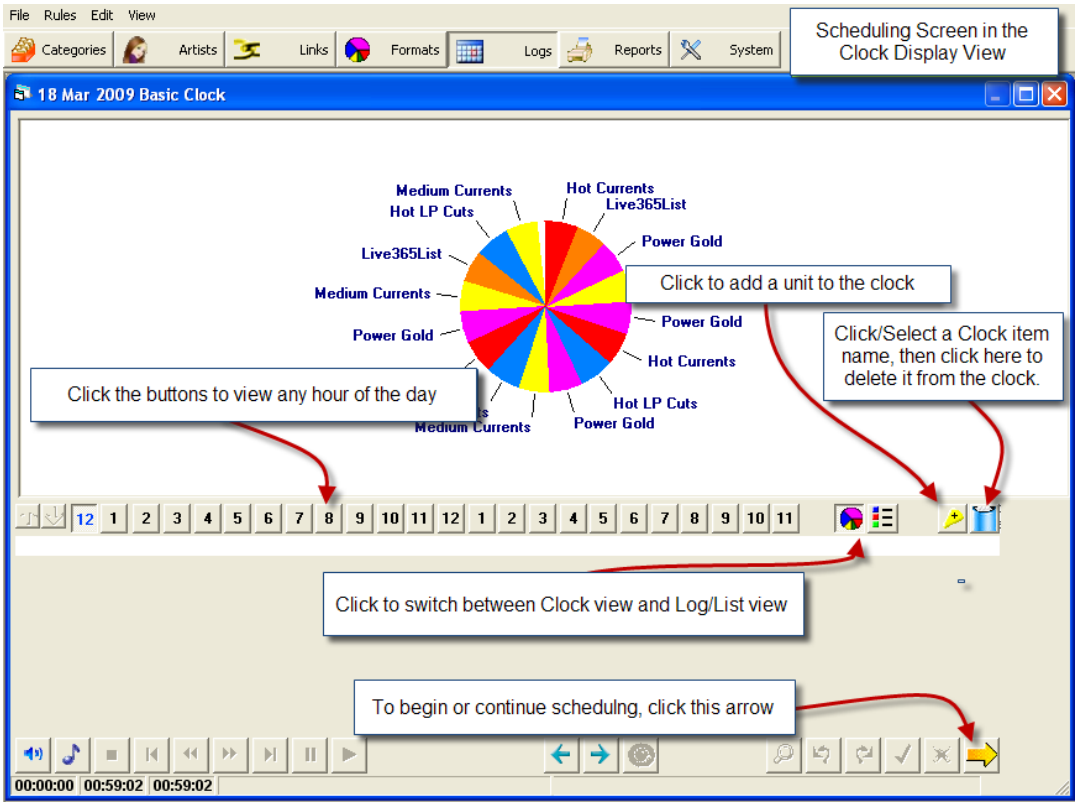
1) Create Categories, Music and Non-Music. Shuffle the music categories. Set the Maximum number of choices for each category.
2) Create Format clocks.
3) Put clocks onto one or more Dayformats.
4) Set the proper 'default' for all 7 days of the week.

Now, you are ready to schedule. Click the Logs button and the Music Logs window will appear with the list of all your previously saved log files.



Click the Make A Schedule button and the default Dayformat for that day of the week will be selected. You may load that one or select a different Dayformat, if needed. Click OK and M1 will load a new, empty music log, ready for scheduling.

Scheduling With Music 1

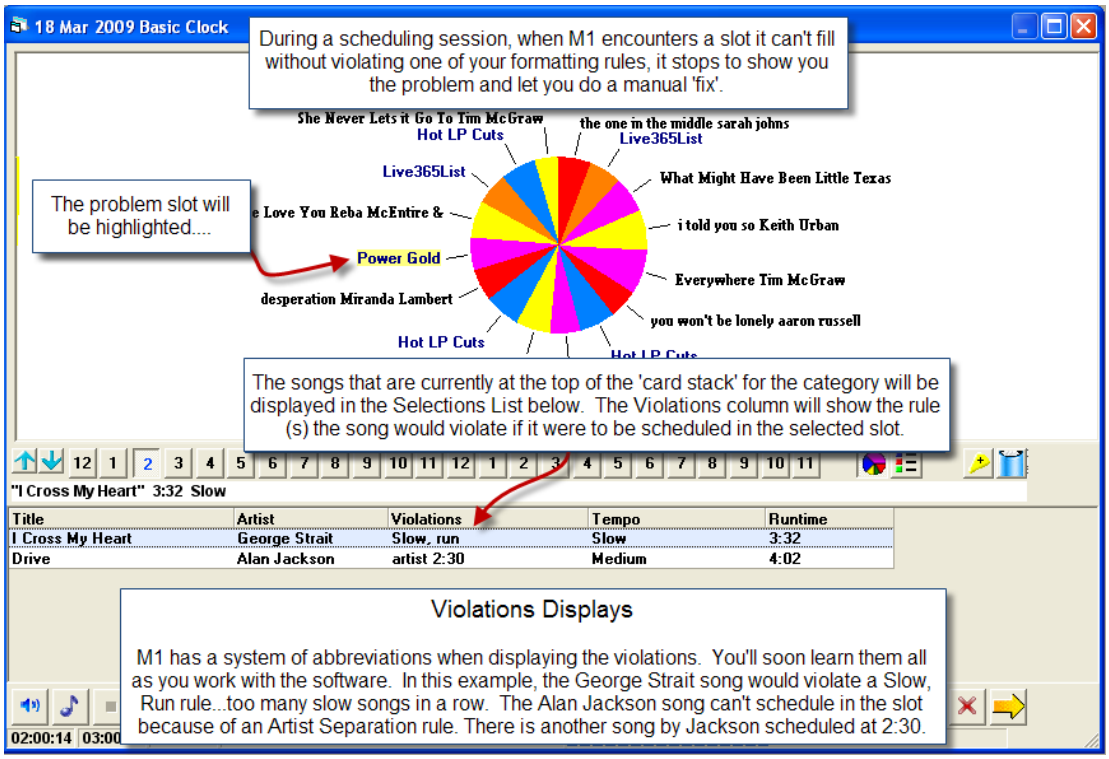


M1 schedules making multiple passes through the day. First it schedules the category that is in Rank position #1 in your Categories list. That list will be scheduled completely in all hours of the day where it is used. Then M1 will make a second pass through the day scheduling your second category and so on.

As it schedules, it observes your formatting rules. When it encounters a category slot where all its choices violate one of your rules, it stops to show you the problem.

When it stops, you'll see many of the Category names around the clock have changed to song titles. Those are the slots that have already been scheduled.

When it stops, M1 will have a category name selected/highlighted with a yellow field next to the clock. At the bottom of the window is the Selections List (the top of the category card stack at that moment in time). Each song title in the list will have a code in the Violations column indicating the rule that would be violated if the song were to be scheduled in the selected slot on the clock.



When M1 stops for a rules violation, you make an editing decision. There are several things you may do to resolve the issue.

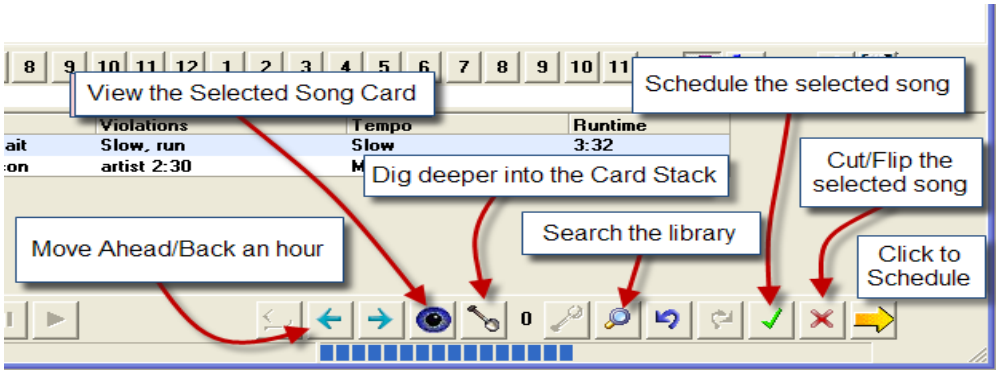
1) You can over-ride a rule and drop one of these songs into the slot. To do that, select one of the songs in the Selections list, then click the green Check Box icon

2) You can dig deeper into the category to find other songs that might not violate a rule in the slot. If your number of selections is 5 and all 5 displayed songs violate a rule, click the Dig button (shovel icon) and M1 will add another song to the list. If that song can schedule in the slot, it will pop to the top of the song list and there'll be nothing in the 'violations' column after it. Click the orange/yellow scheduling arrow and M1 will drop that song into the slot and continue scheduling. NOTE: you cannot dig past the 'bottom' of the card stack. If the Dig icon is not activated, you are at the bottom of the category card stack. Read about "the shrinking selections list" in the User Manual.

3) BEST THING TO DO: You can click to the next hour, click to select a slot of the same category. The songs in the selection list will be displayed and there's a good chance one or more of the songs can be scheduled in this slot without violating a rule. If so, click the

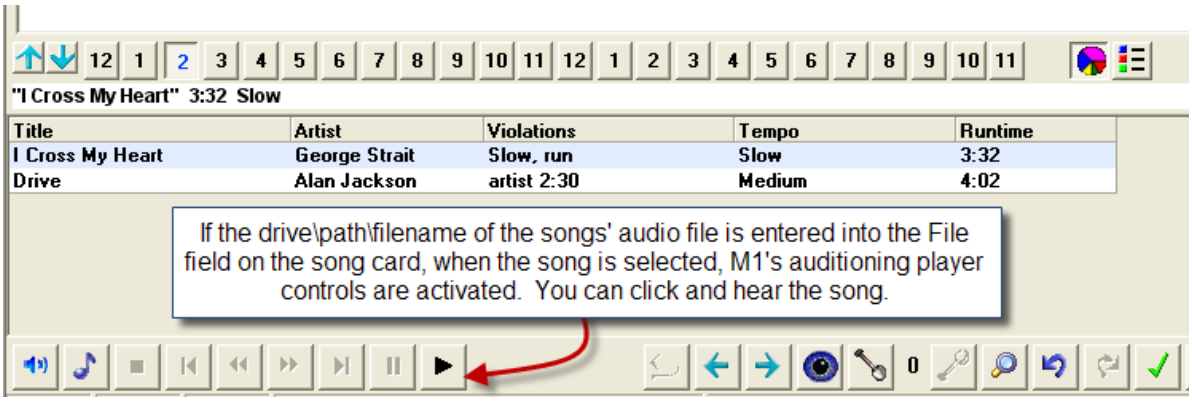
green check mark/select icon button to drop a song into the slot. When you do, another song will move up into the selections list. That new song may well be scheduled in the original slot (last hour) without violating a rule. Click the Schedule arrow/icon. If the 'new' song did fit in the previous slot, M1 will continue on scheduling. If the new song can't fit in the previous slot, M1 will again display that hour/slot and the Selections list and allow you to do some more editing/choices to fix the problem.

4) Click Search button to find a song from another category to put into the slot.



During scheduling, you can point at any scheduled song or category name tag on the click hold the left button on the mouse and drag the song/category to another position in the hour. To do it, you drag the point over to and on top of the other item, highlighting it, then release the mouse button.

You can move songs to another hour selecting then dragging the song onto one of the the hour box buttons at the bottom of the screen.

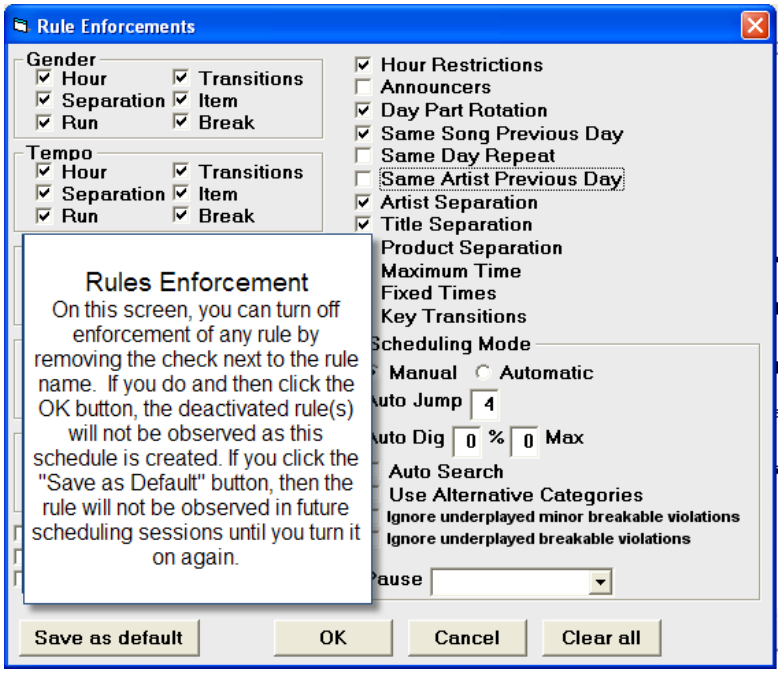


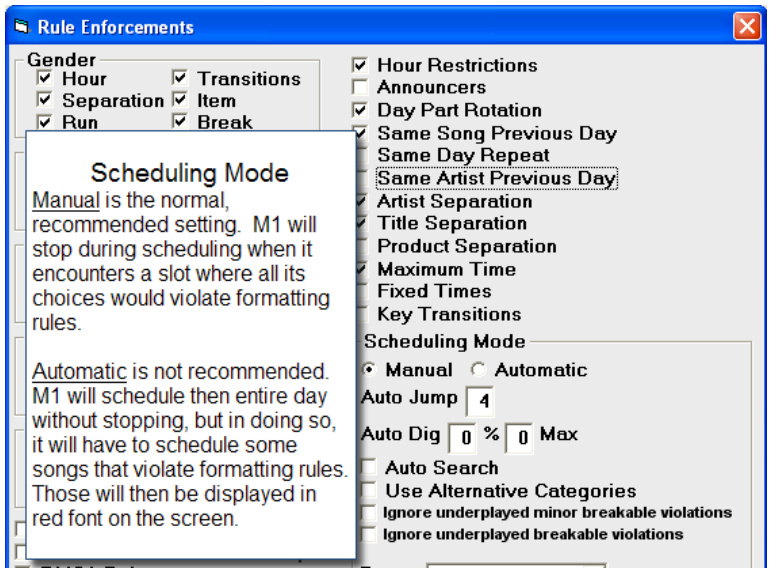
Here are some videos showing how to schedule and edit.

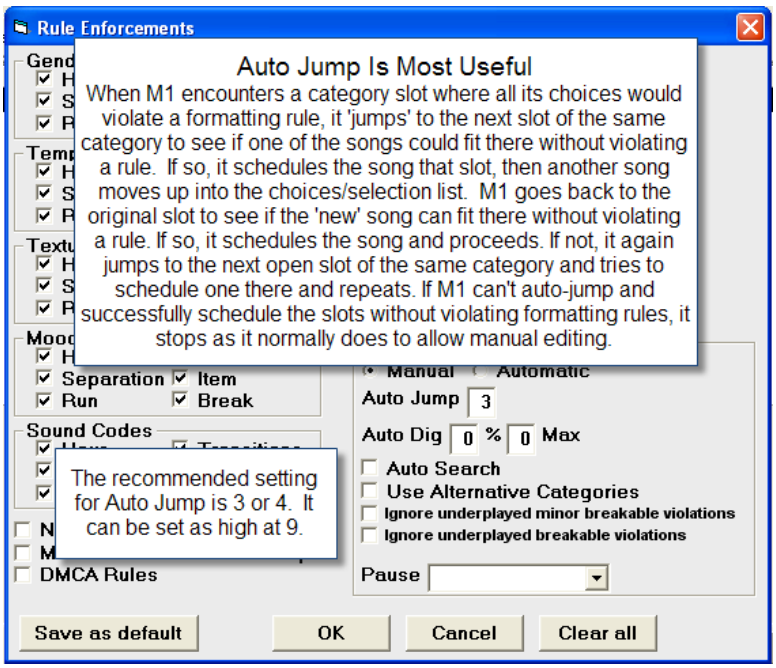
Automatic Scheduling

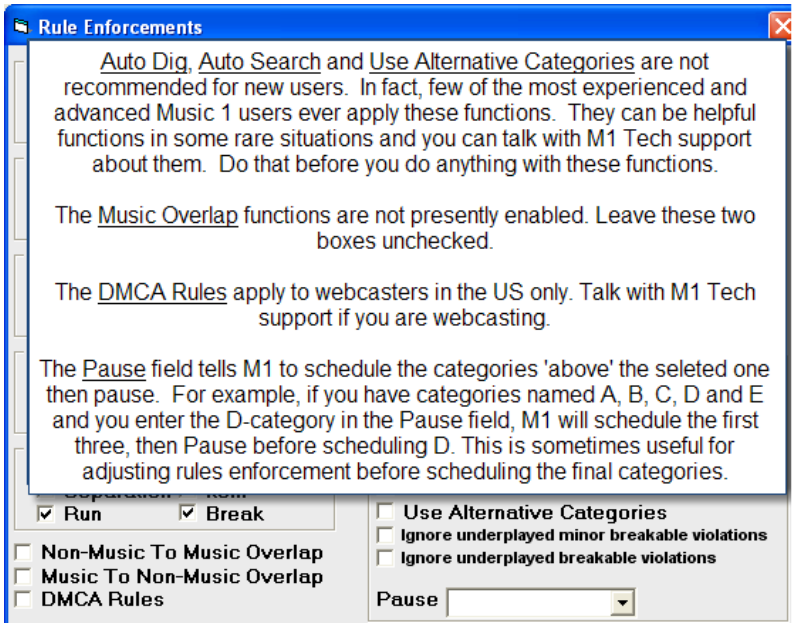
By changing the scheduling mode to 'automatic', M1 will schedule the entire log without stopping, you can then edit the log and deal with rule violations afterwards. This isn't recommended because it is more time-consuming to edit the music logs after all the slots of the day have been scheduled and can result some inconsistency in song rotations.

Automatic scheduling can be useful for producing test logs/playlist quickly. To activate the function, load a new dayformat, open the Rules>Enforcement menu and select Automatic.









Viewing Song Cards As You Schedule

As you schedule, at any time you may open and view Song Cards. Select any song, either on the Clock or in the Selections list at the bottom of the screen. Click the View icon and the Card will be displayed.

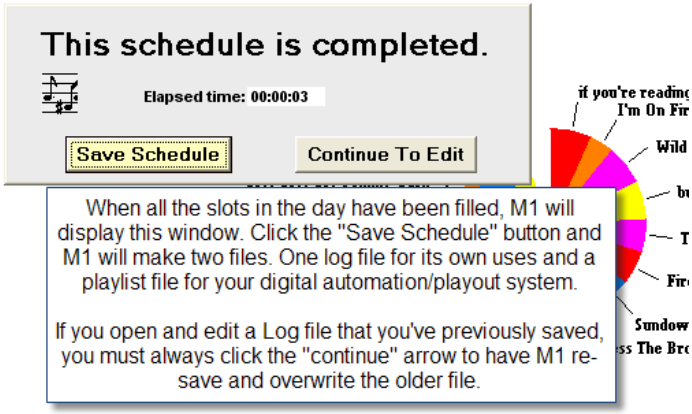
When you do this, by default the Song card will open to the Rotation grid screen showing every hour where the song has played in the past two weeks in bold blue.

You can click and view the other tabs on the Song Card but data contained on a Card can not be edited or updated during scheduling.

This Schedule Is Completed

When all the slots of your formatting day have been filled, Music 1 will ask if you want to save the schedule or continue to edit. If you save the schedule, you may open and edit it later if you choose.

But, since M1 is an interactive scheduler and presented you with editing choices *during* the scheduling run, in most cases you won't need to continue to edit.

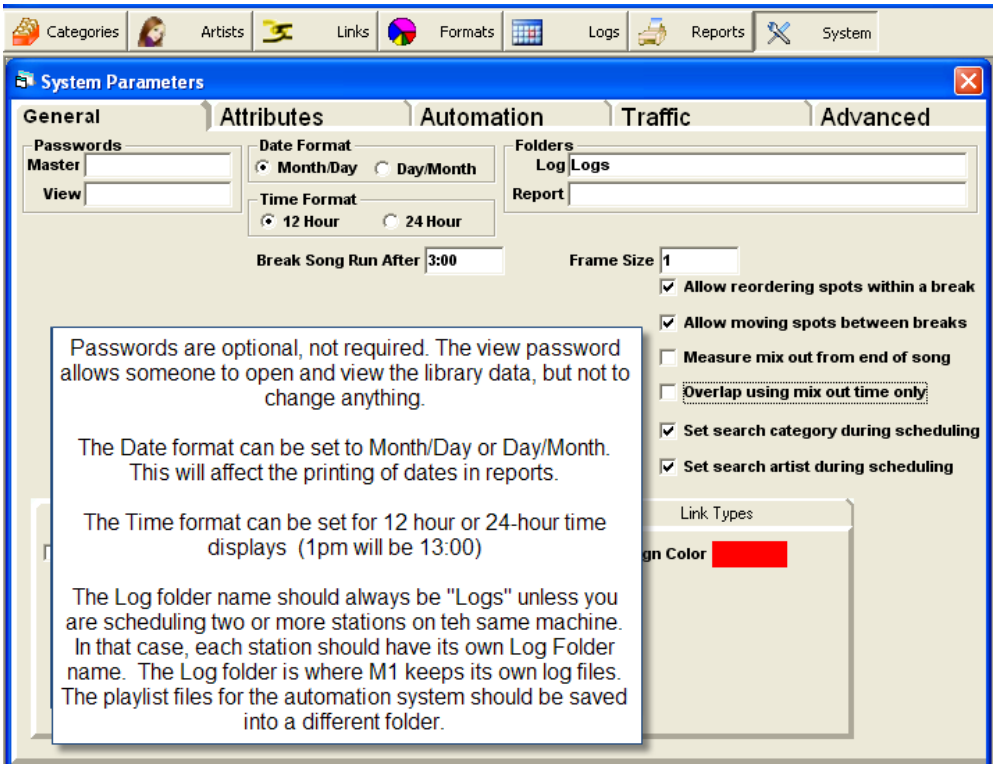


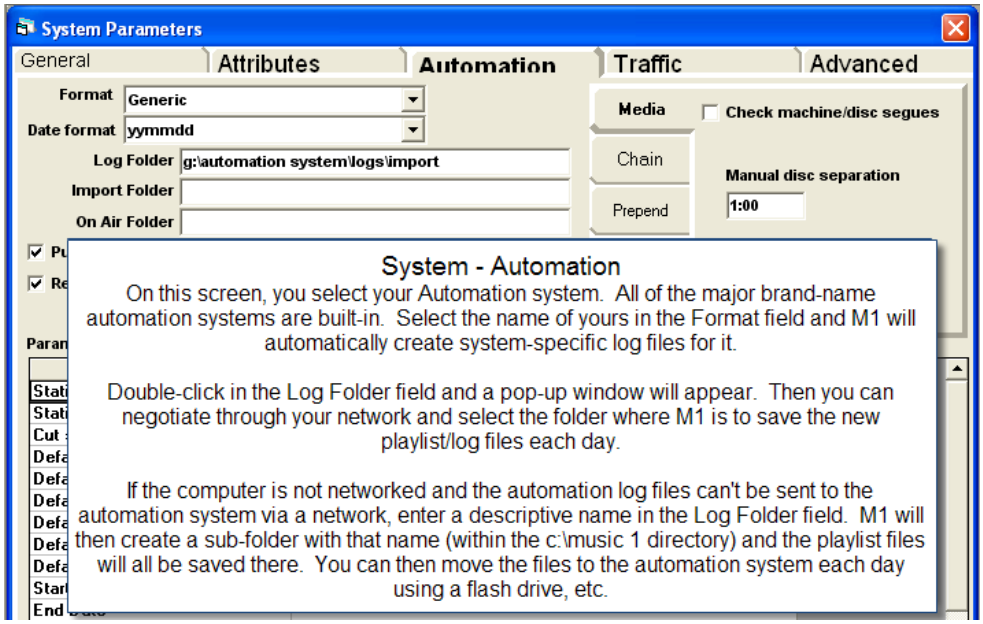
When you save a log, Music 1 automatically creates two files. One for its own uses which can be printed. And another for your digital automation system. You do not have to print a log, but if you do, Music 1 allows you to custom design your printed log. It can be printed to paper or to a text file which can be opened and printed with a word processor or imported into other software (for your website, for example).

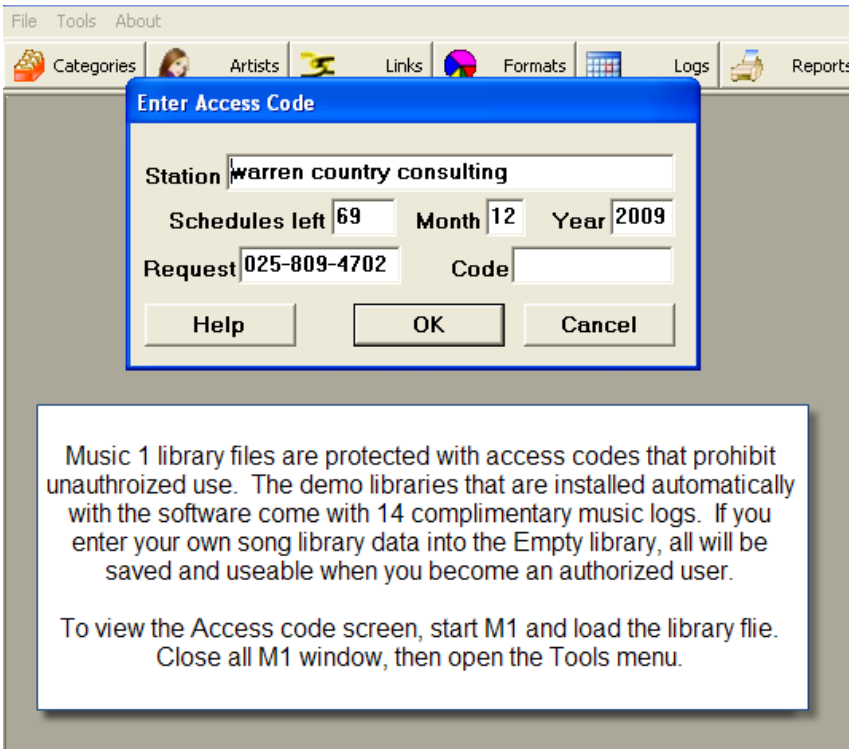
Scheduling Commercials

Music 1 doesn't schedule commercials, but it can import the advertising log file from any traffic and billing software. Then, you can manipulate all the units that are imported and print and/or export a fully merged log file to the automation system.

If you are going to import the advertising log, you will add Spot Break items to your format clocks. The "nominal start time" for the spot breaks on each clock will need to correspond to the set times for each break in the Traffic scheduling software. And there will need to be an initial set-up to enable M1 to properly read and import the traffic log file. M1 tech support will assist with this process.


Categories
Artists
Links
Formats
Logs
Reports
System
System Parameters
General
Attributes
Automation
Traffic
Advanced
Passwords
Master
View
Date Format
Month/Day
Day/Month
Time Format
12 Hour
24 Hour
Folders
Log Logs
Report
Break Song Run After 3:00
Frame Size 1
Allow reordering spots within a break
Allow moving spots between breaks
Measure mix out from end of song
Overlap using mix out time only
Set search category during scheduling
Set search artist during scheduling
Link Types
Passwords are optional, not required. The view password allows someone to open and view the library data, but not to change anything.
The Date format can be set to Month/Day or Day/Month. This will affect the printing of dates in reports.
The Time format can be set for 12 hour or 24-hour time displays (1pm will be 13:00)
The Log folder name should always be "Logs" unless you are scheduling two or more stations on teh same machine. In that case, each station should have its own Log Folder name. The Log folder is where M1 keeps its own log files. The playlist files for the automation system should be saved into a different folder.

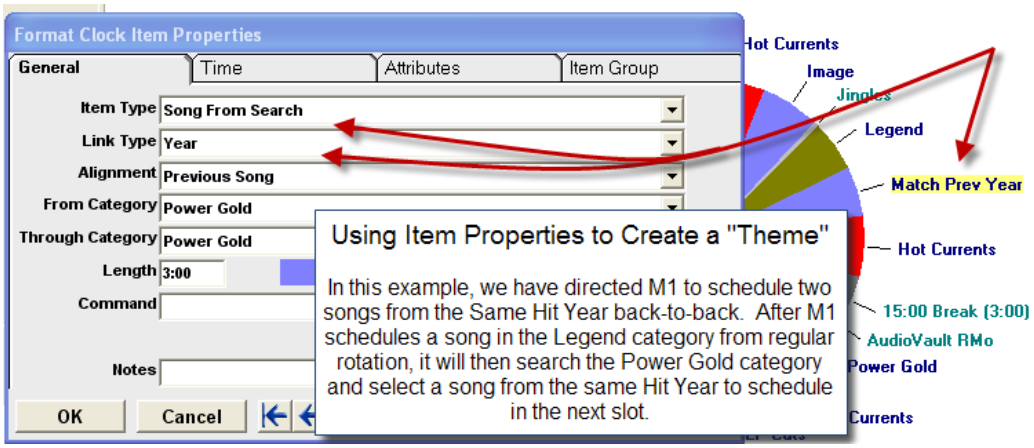

System Parameters
General
Attributes
Automation
Traffic
Advanced
Format Generic
Date format yymmdd
Log Folder g:\automation system\logs\import
Import Folder
On Air Folder
Media
Check machine/disc segues
Chain
Prepend
Manual disc separation
1:00
System - Automation
On this screen, you select your Automation system. All of the major brand-name automation systems are built-in. Select the name of yours in the Format field and M1 will automatically create system-specific log files for it.
Double-click in the Log Folder field and a pop-up window will appear. Then you can negotiate through your network and select the folder where M1 is to save the new playlist/log files each day.
If the computer is not networked and the automation log files can't be sent to the automation system via a network, enter a descriptive name in the Log Folder field. M1 will then create a sub-folder with that name (within the c:\music 1 directory) and the playlist files will all be saved there. You can then move the files to the automation system each day using a flash drive, etc.



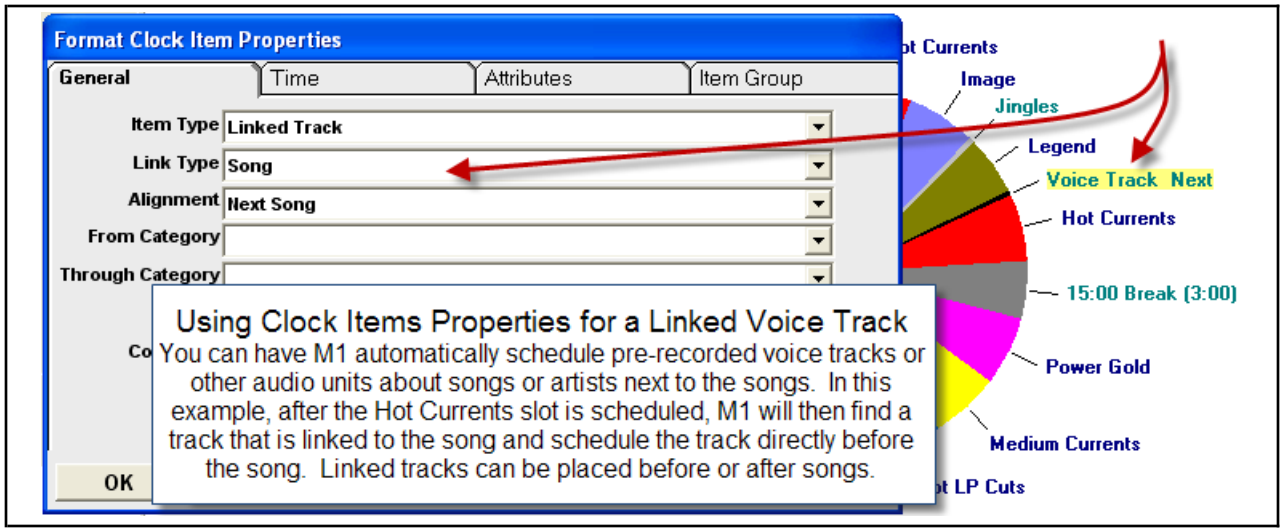
Extras

Using Item Properties To Create A “Theme”

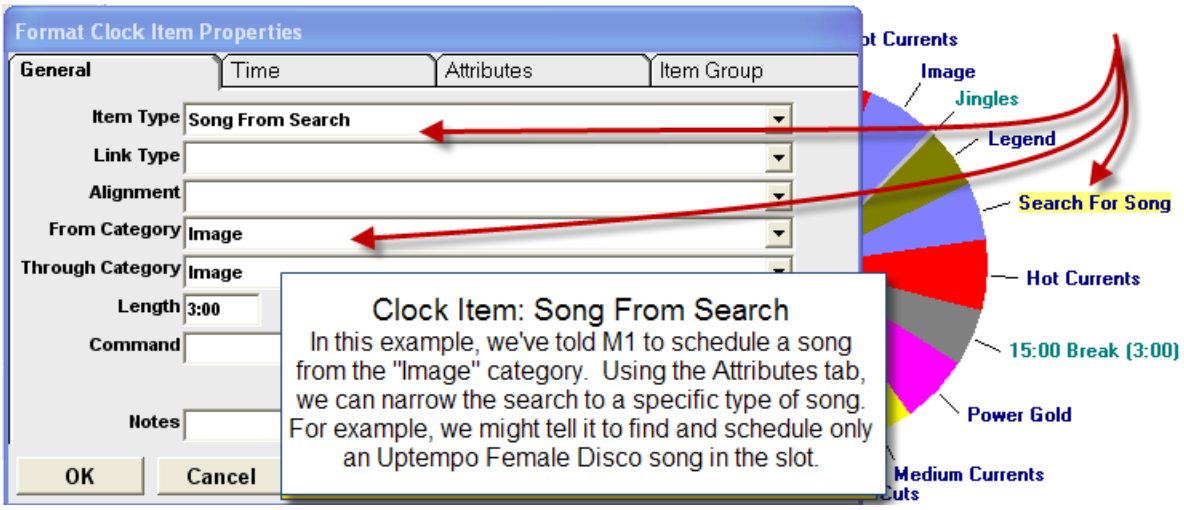
The Format Clock Item Properties controller can be used to create “double-shots” to schedule two songs in a row of the same type. It can be used to search and select other specific types of songs or non-music units in specific places.

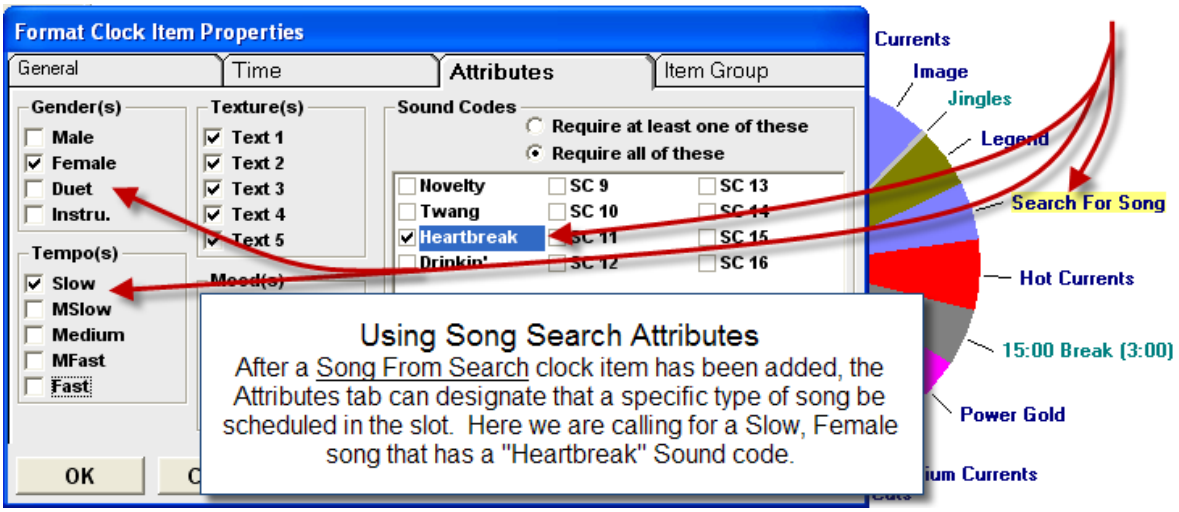


Scheduling Linked Tracks



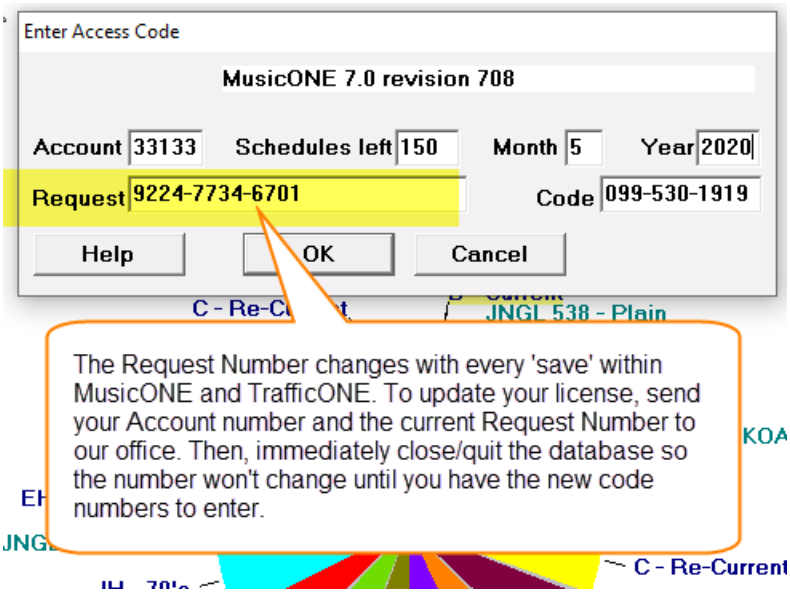
Song Search and Non-Song Search provide a way to have M1 search, find and schedule specific kinds of songs or other items on a clock. Song Search works exactly like the theme programming example given on previous page.





Licensing and Registration

Originally, the software required a dongle that plugged into the computer as a software 'key'. We moved away from dongles in order to make MusicONE easily portable, not requiring each computer to be 'registered'. To prevent software theft, we license each database with an encrypted key number (the Request number) that changes constantly as you work with MusicONE.



Licenses are updated quarterly or annually, depending on your licensing term. To update the license, you will email or phone in your Account Number and the current Request Number.

This can be a little tricky at first because you can't change the request number. The application controls it and changes it all the time and every time you do any type of 'save' in M1. Moving a song to another category, for example, will change the Request number. This revolving lock/key is our anti-hack system that allows it to work without a dongle and also makes it

portable. You can install M1 itself on any computer, then drop your (station) .m1 library file into the M1 folder on the machine and work without needing to 'register' that machine.

Backstory - A brief history of the development of modern music radio

In the middle 1950's radio was in the tank. Television had exploded in the US as quickly as the internet overtook our generation. In fewer than 10 years following WWII, all of the radio stars and shows had moved to the tube taking a huge chunk of radio's advertising income with them. Three things resurrected the business. 1) Rock ' Roll music (with help from the new 45 rpm records). 2) The transistor radio. 3) The Baby Boom and roaring post-war economy. The American kids had more money than kids had ever had in human history.

The story goes, a young radio station owner named Todd Storz was sitting in a bar in Omaha Nebraska, depressed and contemplating the prospects for his money-losing radio station when he became aware that one guy was feeding nickels into the jukebox machine playing the same song over and over. He watched a woman doing the same thing, playing her one song. Eureka! People want to hear their favorite songs over and over and over again. He hired five 'disc jockeys' and told them to play rock 'n roll records.

Within three years, there was at least one rock n' roll radio station in every American city and they were nearly all making more profit than ever. All of the stations were playing nothing but new music. Rock 'n roll music was in its infancy and it took a few years before there were any "oldies" to play.

At first, each disc jockey walked into the control room with his own box of records. The problem with this was soon obvious. The Afternoon guy favored Rock-a-billy; Everly Brothers, Buddy Holly, Carl Perkins. The Mid-day guy liked R'n'B and his shift would be heavy with Fats Domino, Ray Charles, Jackie Wilson. The kids liked all of those singers, but the songs needed to be mixed correctly if the station wanted to be Number One.

Spurred in part by the payola scandal of 1960, music radio stations put control of the playlist into the hands of one guy. The station program or music director then selected all of the records, DJs could play only the approved songs . The first MD's installed rudimentary song rotation systems to ensure that all of the songs in each Category or rotation group get equal airplay, the same number of 'spins' each day and week.. It was also important that the most popular songs were played much more frequently than the others.

The first Rotation system was built with four stacks, later five stacks of records:

A) The "Hots", the top ten-to-fifteen most popular Current hit songs.
B) The "Mediums", twenty to thirty records, a mix of the most promising new songs and others that had peaked in popularity and were in their last few weeks of airplay.
C) The "New Adds". These were newly released records that the MD thought had the best chance of becoming Hits. Depending on the MD, this might be anywhere from three to a dozen brand new records.
D) The "Oldies'. By the time Rock 'n Roll was about five years old, Top 40 radio had a few hundred older Hits to work with. Moving into the 70's, with the growing abundance of past hits, music directors began creating two categories of Oldies; Power Gold, the super hits; and Secondary Gold, lesser past hits used for music flow balance and filler.

E) With the advent of newer music research techniques a new category named Recurrent (short for: Recent Currents) came into wide use as Program directors discovered the hit songs from six to eighteen months earlier were the most valuable songs in their library.

The disc jockeys were to play a record from each stack; A, B, C, pick an Oldie and repeat. The DJs picked from the top of the stack, played the record and returned it to the bottom of the stack. The records were usually placed into four boxes with the DJ picking from the front and placing to the rear. Additionally, they were also given some basic music flow rules: Don't play two slow songs back to back. Don't play two R'n'B songs in a row. Don't play two Country-tinged songs in a row. If a DJ was playing a Slow song from the A-stack and he saw the next one in the B-stack was Slow, he'd play the second song in the B-stack, then play the Slow B after the next A.

Moving into the middle-60s, as more stations switched to All Music All The Time formats, smarter program/music directors began developing more intricate systems to better control song exposure and music flow. All of the records were numbered and the numbers were entered into hour-boxes on schedule grids that the DJs had to follow. When he signed on, the MidDay jock would see that in the 10am hour this day he was to play Hots #3, 4, 5 and 6. And he would have Power Gold #'s 105, 106 and 107 pre-slotted for the hour, and so on. With the number grids, the music director could be sure that Hot #3 which was scheduled for 10:07 on Monday would not be played at exactly that time again during the rest of the week. He could see that the Power Gold songs that played in Mid-day would be scheduled in each of the other parts of the day before getting a repeat-play in Mid-day. The seed of Music 1 grew from a formatting system like that.

Not all of the songs were pre-scheduled; perhaps just the Hots, Recurrents (recent hits) and the Power Oldies; those three categories filling about 60% of the songs in the hour. The DJ's got to pick the songs from the B-Medium stack and Secondary Oldies and in so doing, they were to choose songs that followed the station's programming directives, such as: no Slows back to back, only one song by any Artist in the hour, Don't play "this" type of song next to "that" type of song.

The Coming of Music Scheduling Software

In 1980, radio's first music scheduling software was released. It's name was Selector and it was complicated. The user manual weighed over four pounds. It took weeks to learn and months (or years) to master. We discovered the relatively simple manual rotation plans we'd been using weren't so easy to replicate with software. What software lacks is the human element, nuance, the ability to make the best creative choices when rotation conflicts are encountered as the software builds a new playlist/schedule.

Music categories, music rotations are much like gears inside any machine. Some gears are small, they have fewer songs and they spin faster than the larger gears, those being categories with more songs in them. The most successful music radio stations use between five and seven categories of songs. Here is an example of the music category formatting for a commercial, "Today's Hits" -type of station:

1) The songs in Group 1 (the Hots) are scheduled to play 7 times a day.
2) Group 2 songs (Mediums) are set to play five times a day.
3) Group 3 songs (New Adds), three times a day.

4) Group 4 (Recurrents), five plays per week.
5) Group 5 songs (Oldies) will each be scheduled seven times a month.

All five of these Groups/Categories are mixed with the others as their gears turn. Each group may contain types of songs that the music director does not want to play next to others of the same type. Example: The MD does not want to play two Slow songs back to back. If the turning gears come to a position in the hour where a Group 2 Slow song is scheduled and Group 3 has Slow a song slated to be next to it. The disc jockey would go "one deep" and pick the next Fast song in Group 3 and then play that Slow song in the next Group 3 slot later in the hour. Software could easily be written to do that simple thing. But what if the next Fast song in Group 3 was by Adele and there was another Adele song already scheduled elsewhere in the hour? And what if the next Fast song after that one in Group 3 and the station has a 2-hour Artist separation rule. And then what if the next Fast song from Group 3 had been scheduled in this same hour the last time it played?

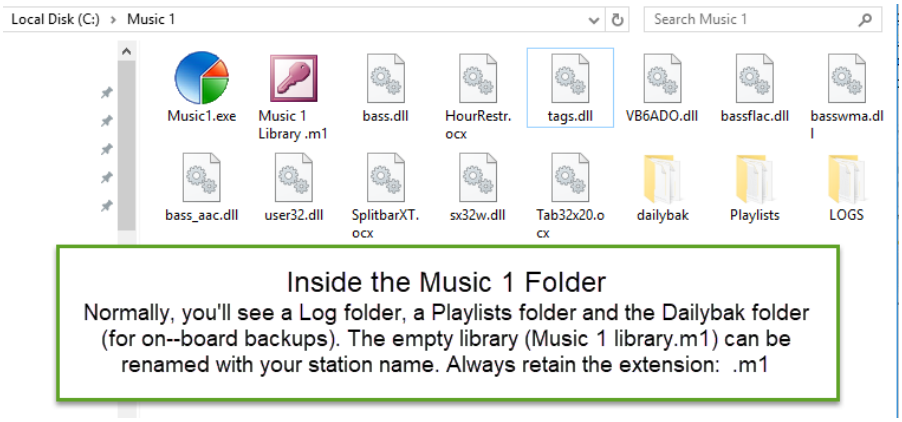
In the live-DJ days, the guy in the control room would have been instructed about how to move the songs around in the hour in such a way to get them all played while also maintaining the station's formatting and music flow plans. To do it well, a good disc jockey would consider the songs he'd played up to this point in the hour. He'd look at the pre-scheduled songs coming up. He'd count the total number of Slow songs the hour was going to have and the types of songs. Is this Slow song a love song or a broken-heart song? Is the singer male or female? Any number of small factors would have figured into his decision. In the end, it was the disc jockey's "feel" for the music flow that guided his selection. The problem with computers is: they have no feel for the music.

This is the scenario MusicONE replicates for you. Like DJ's of old, you make the proper editing decisions on the fly. Most of the songs are going to fall into their appointed slots with ease. But it is unavoidable that the scheduler will encounter some slots where the songs at the "top of the stack" won't fit without violating one of the basic music flow rules. So, it will stop there, show it's choices and the music flow problem. You make a quick DJ decision and click the Go mutton in M1 again. It continues its work and looks for any other problem slots to show you.

As other music scheduling schedulers build the daily log, when they encounter problem slots, those where all of it's song choices would violate formatting rules, they can be set to do one of two things. Either it can select the "least objectionable" song based on a format rules hierarchy. Or, it can leave the slot empty. After the software runs the day, the music director then edits the schedule, fixing the rule violation-flagged songs or filling the slots left empty.

The music directors at successful radio stations spend an average hour or more editing each daily music schedule when using a traditional music scheduler. Music 1 users get it done in under ten minutes. And the more important benefit is Music 1 delivers the most consistent song rotations and music flow in the business. And it always sounds better because you are making the edits as you put it together. Humans beat computers at this, hands-down.

Inside the Music 1 Folder



Inside the Music 1 Folder

Normally, you'll see a Log folder, a Playlists folder and the Dailybak folder (for on--board backups). The empty library (Music 1 library.m1) can be renamed with your station name. Always retain the extension: .m1