

Playlist separation rules and its limitations,

it is obvious that your separation rules cannot be satisfied when there are too few tracks. If you only have 100 tracks, and need ~20 per hour, the songs will play at least every five hours.

One thing I find strange in your screenshots is that the same song is used twice within the same hour. That is pretty unusual, because normally the track separation should have precedence over the other rules. I suspect it is related to your particular separation and penalty settings, but there might also be a bug. If you send me the database file, I can check it.

Why doesn't the Mini Scheduler refuse to build the playlists?

The answer pretty simple: Because all separation rules are, by definition, "soft". In other words: Better break a separation rule rather than play nothing at all. By the means of the penalty settings in the configuration, you can define which rule is more important than the others.

To understand this better, let me explain how the scheduler works:

For each "random item from folder" entry in the template, the scheduler takes the list of songs in that folder and sorts them by the last time they were used (oldest first). Then it goes through that list and calculates a "penalty score" for each song, which works like this:

First calculate the number of hours that the track, the title and the artist were last played. Then compare these numbers to the separation settings in the configuration.

If all three values are above the configured separation, the song has a penalty score of "0", which is the best value, and the song is a "perfect choice" for this slot.

If a value is below the separation, the scheduler will add penalty points to the score: the penalty set in the configuration, multiplied by the number of hours that the artist/track/title is early.

Example: Artist separation is 4 hours with a penalty of 2. But the artist has been played only one 1 ago, which is 3 hours earlier than configured. So the artist penalty for that song is $3 \text{ (hours early)} * 2 \text{ (artist penalty in config)} = 6$ points.

The same calculation is made for the track and the title, and the three penalties are added to the total penalty score of that song.

If there is one ore more songs with a score of 0 (no separation violated), the scheduler will pick one of those songs.

If all songs have a score of > 0 , that means that at least one rule was broken. But according to the "better break than nothing" principle, we have to pick a song, so the scheduler will take the one with the lowest score.

As you see, the separation rules can always be broken if necessary, and you can use the penalty settings to adjust the importance of the particular rule.

As you add more music to your library, the scheduler will be able to stick to the rules better.