Traffic and Digital Media Libary

Volume IV of The WMUL-FM Operations Manual

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Volume IV of The WMUL-FM Operations Manual

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For Students, Staff, Faculty, and Community Volunteers Participating
in the Traffic and Digital Media Library Departments of Radio Station
WMUL-FM 88.1 MHz

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21. Overview of the Traffic Department

Reader's Notes

The Traffic department assists many other departments in achieving their successes even if it does not receive the same public recognition for its efforts.

The Traffic department helps the Student Manager and Music Director keep track of the operators. Traffic informs them when an operator misses an airshift. If something goes wrong on-air, Traffic has records of the operator who was on duty.

It also helps the Training Coordinator identify operators who need additional help. An operator who is having trouble with the logs is likely having trouble with other aspects of their airshift.

Traffic helps the Faculty Manager and Operations Manager know that the volunteers are operating the station in a legal manner. The Traffic Department ensures that an operator performs the Daily EAS Receiver Check each day. Traffic also checks that the operators are keeping the station within its authorized power range.

21.A. How to Use This Manual

This manual presents task instructions in three ways. It starts with a top-level overview of the task. Step-by-step instructions and full explanations follow the overview. The manual concludes with a quick-reference summary. If the step-by-step instructions fit on one page, the manual omits the overview and the quick-reference.

22. Music Scheduling

Reader's Notes

WMUL-FM uses the program "Natural Music 5" for music scheduling. The Traffic Director and the Digital Media Librarian maintain this program. This program has a database listing all the music available to the automation system. It also has a user-created database of music categories, clocks, and clock grids. The program uses the song database, music categories, clocks, and clock grids to create a selection of music that fits the formats for each day of the week.

Traffic handles the generation of the daily music schedules. The Digital Music Librarian handles the rest of the program. Both directors may benefit from reading these sections to cover each other's related duties.

TERMINOLOGY

This section uses the terms "music log" and "music schedule" interchangeably. A music log is a record of what actually aired. In contrast, a music schedule is a list of what is planned to air. Unfortunately, both "Natural Music" and "Rivendell Radio Automation" use the term "music log" when they really mean "music schedule".

Reader's Notes

22.A. Generating Music Schedules

Traffic oversees the generation of the daily music schedules and double-checks the computer's work.

22.A.1. When to Generate a Music Schedule

Traffic should generate the music schedule for a given day between one (1) and seven (7) days prior. For instance, Traffic should generate Saturday's log sometime between the previous Saturday and Thursday. Being at least a day ahead accommodates voice-tracking. Not being more than a week ahead makes certain that music schedules are created using an up-to-date music database. During Thanksgiving, Winter, and Spring Breaks, the schedules can be created farther in advanced if the Traffic Director is leaving the area during the break. (Little music will be ingested during those times anyway.)

22.A.2. How to Generate a Music Schedule

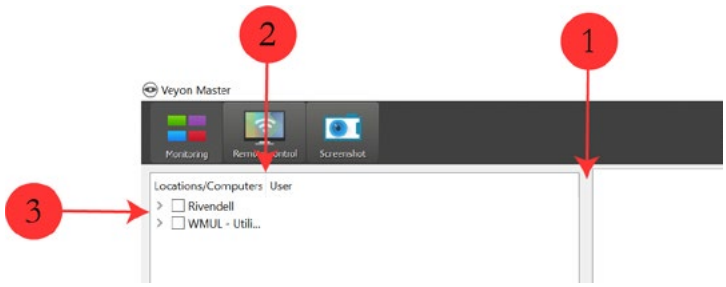
22.A.2.a. Overview

Traffic uses remote access software to access the Virtual Machine that has "Natural Music" installed on it, then commands the computer to generate a music schedule for a specific day. "Natural Music 5" generates the initial schedule and Traffic double-checks the computer's work. Traffic checks the schedule for missing songs and for sufficient duration of songs each hour. Traffic may have to add, swap, or delete songs to create a good schedule. Once the schedule is satisfactory, Traffic publishes it to the automation. Traffic then accesses an automation workstation using remote access software and tells the automation to import the newly published schedule.

22.A.2.b. Step-by-Step

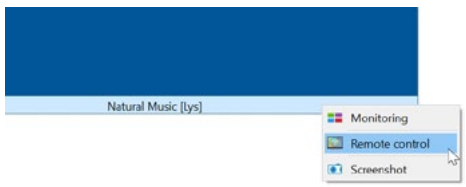
1. Log in to the Traffic Director's computer or Music Director's computer.
2. Double-click on "Veyon Master" on the desktop or in the start menu.
   The "Veyon Master" window will appear. Veyon is the software that allows the Traffic Director to access the Virtual Machine (VM) that runs "Natural Music 5" and to remotely access the automation workstations.

Reader's Notes



3. When the window first appears, it may be necessary to drag the bar (1) separating the sidebar from the main window and then the bar (2) separating the "Locations / Computers" column from the "User" column to the right in order to make room on the window.
4. If needed, click the right-pointing caret ">" (3) to expand the two groups. This is a list of the six (6) Rivendell workstations in the studio complex and the Virtual Machine running Natural Music.

5. Click the box next to "Natural Music [Lys]". A thumbnail showing the display of that machine will appear in the right-hand window pane.
6. Right-click on the thumbnail and select "Remote Control". A window will open that shows the display and allows the operator to use the remote computer. This remote control screen runs in the local session, the same as if the operator were sitting at the keyboard and monitor.



Reader's Notes

NOTICE

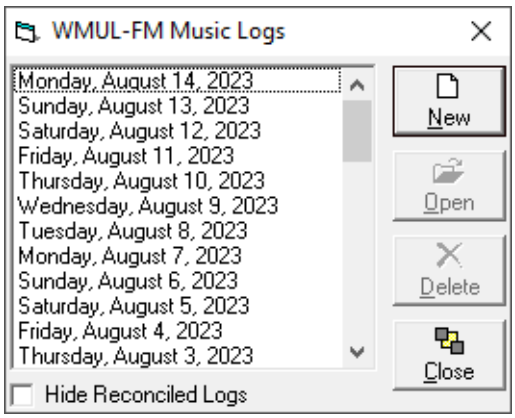
All remote access users and the local user see the same screen. If you access the Natural Music VM at the same time as the Music Director, you will each see what the other is doing and may interfere with each other.

The same interference may occur when accessing the Rivendell workstations.

Be prepared to communicate with a local user when accessing the Rivendell workstations remotely (or to remotely access a different workstation).

7. Log in to the Natural Music VM using the wmul credentials. You may need to give the remote connection up to 30 seconds to settle down and become stable.
8. Double-click on the "Natural Music 5" icon on the desktop of the Natural Music VM. The program will load.

9. You may be asked to select which database to use. (This generally only happens the first time you open the program.) Select "WMUL-FM" and click "Open".
10. Click the "Logs" menu-item in the top menu. This item is just a button. It opens a dialog box, not a submenu. The "WMUL-FM Music Logs" dialog box will appear in the middle of the window.

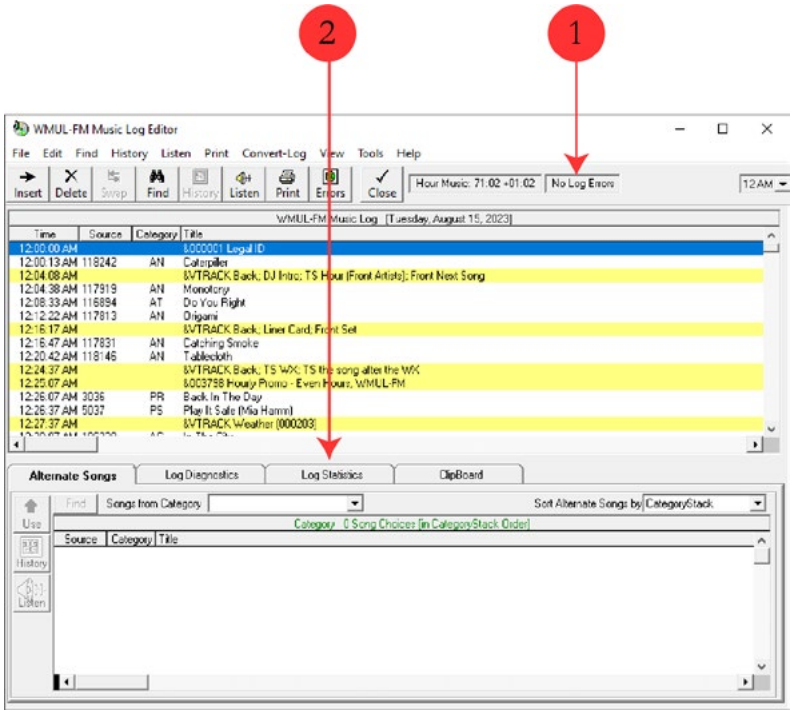


Reader's Notes

11. Click the "New" button on the "WMUL-FM Music Logs" dialog box. The "Create New WMUL-FM Music Log" dialog box will appear.

12. Choose the date for which you are creating a new log using the first line: "Create New Log for". The program will automatically set this date to be the day after the most recent existing log. In the previous screenshot, the most recently created log was Monday, August 14, 2023. The "Create New WMUL-FM Music Log" dialog, therefore, presumes that the you want to create a log for Tuesday, August 15, 2023. (A reasonable presumption.)
13. Choose the clock grid to use when generating the log. At the time of this revision, four clock regular grids were in use. If you are uncertain which grid to use, see See 2.B.2. Selecting a Clock Grid on Page 19.
14. The "Automation Type" will always be "Rivendell".
15. Make certain that "Discard Empty Optional Song Slots After Log Build" is checked.
16. Click the "Create" button in the middle of the right-hand side. The "Create New WMUL-FM Music Log" dialog box will change. The exact words after "Logging" will change several times and the progress bar will fill several times.
17. After about one to two (1-2) minutes, the dialog box will disappear and the music log will replace it. The "WMUL-FM Music Log Editor" window will appear. You need to check two (2) sections of this window for each log generated.

Reader's Notes



18. First, check the Errors label at the top middle of the window (1). Most of the time this will read "No Log Errors". An error here means that the software was unable to find a song for that slot.

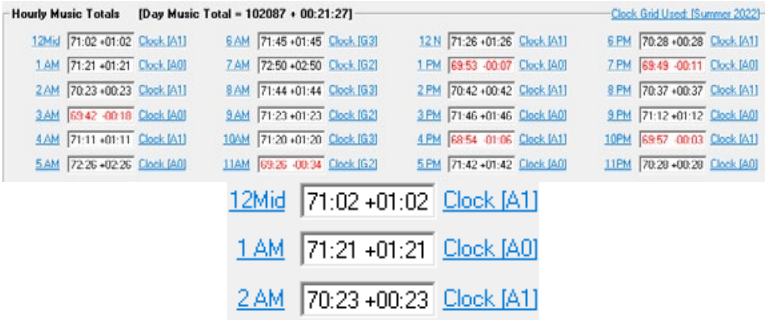
    The program has requirements for artist and title separation and, on rare occasions, will be unable to select a song for a slot.

19. If the box has a number in it, click the "Errors" button to jump to each error.

    Before adding a song into the empty slot, cross-check with the "Log Statistics" screen explained in steps 20-22. If there is already enough music in the hour, there is no need to add another song.
    Often, the best solution for finding a song is to surrender on artist separation. Select and insert another song by one of the adjacent artists. Two songs in a row by the same artist is called a "double-shot" or "two-fer". The other option is just to pick another artist deep in the category list. See 22.A.3. Swapping a Song in the Schedule on Page 15.

Reader's Notes

20. The second thing to check is the "Log Statistics" tab (2). Click on it and the "Log Statistics" panel will appear.



The "Log Statistics" panel includes an hour-by-hour total of how many minutes of music and imaging has been scheduled. Each entry consists of a total and a plus or minus, both in MM:SS format. The software is set to aim for a specific number of minutes of music each hour. The target is generally 70:00, but can be set to any number and can be set to a different number for each hour.

The plus or minus indicates the difference between the target duration and the actual duration. WMUL-FM intentionally over-schedules each hour. Over-scheduling ensures that the hour will not be short if one or more of the scheduled songs does not play. If the hour is short, then each subsequent hour will start early. If several hours are short, then the Legal ID gets farther and farther from the top of the hour.

The total is the important number. In a regular hour of music, the total should be somewhere between 65 and 75 minutes. Hours that have Newscenter 88 or other special programming built-in may have very large totals (the duration of the special programming plus an entire hour of music as backup). Large totals are normal for hours that have special programming scheduled.

- The text for the hour (E.G. "1 AM") is a clickable link that will jump the display to that hour.
- If the total is too low, insert an extra song or two into the playlist at the end of the hour. See 22.A.4. Inserting Additional Songs Into the Schedule on Page 17.

Reader's Notes

- If the total is too high, first check to see if any of the scheduled songs are particularly long. If so, delete that song. If none of the songs are particularly long, delete one or two songs at the end of the hour. See 22.A.5. Deleting a Song from the Schedule on Page 17.

21. Once the music schedule is acceptable, click the menu item "Convert-Log" and then "Automation Log". The "Create Automation Log" dialog box will appear.
22. Make certain the "Automation Log Type" is set to "Rivendell", the "Automation Log FileName" starts with T:\Traffic\Music Logs\Rivendell\ , and the "Station Number" is "1".

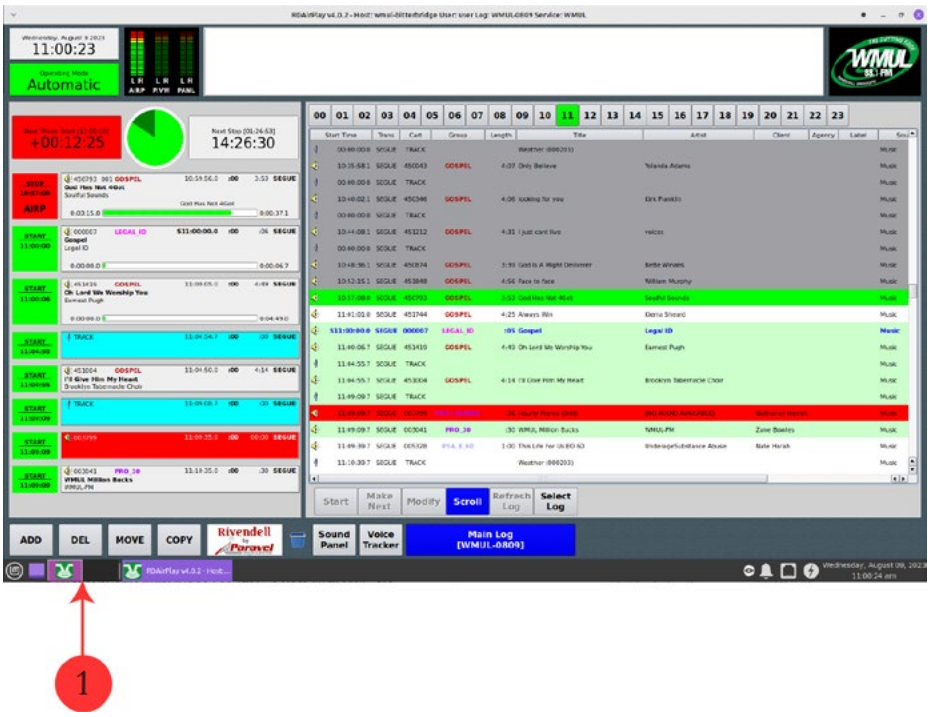
23. Click on the "Convert" Button at the bottom of the dialog box. After a few seconds, the "Automation Log Done" dialog box will appear.
24. Click "OK" on the "Automation Log Done" dialog box. "Natural Music" will return to the "WMUL-FM Music Log Editor" window.
25. Click "Close" on the button bar of the "WMUL-FM Music Log Editor" window. "Natural Music" will return to the main window.
26. Repeat steps 10-25 for each date that you are generating a music schedule.
27. Go back to the "Veyon Master" window
28. Check the box next to "Studio A - Rivendell 1 [Bitterbridge]". A thumbnail showing the display of that machine will appear in the right-hand window pane.
29. Right-click on the thumbnail and select "Remote Control". A window will open that shows the display and allows the operator to use the remote computer. This remote control screen runs in the local session, the same as if the operator were sitting at the keyboard and monitor. You may need to give the remote connection up to 30 seconds to settle down and become stable.

Reader's Notes

REMINDER

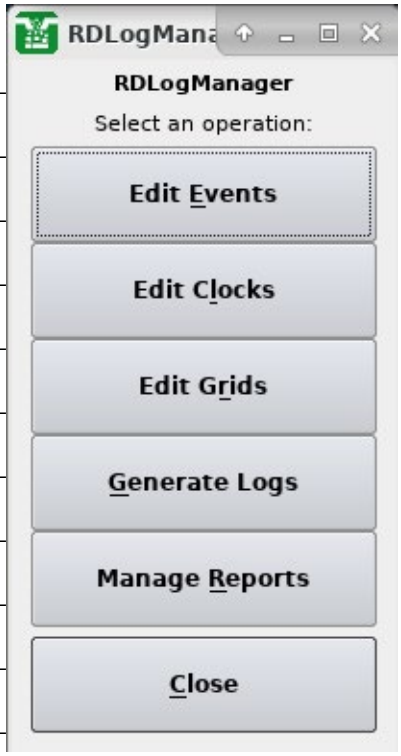
All remote access users and the local user see the same screen. If a DJ is already using the Studio A - Rivendell 1 machine, the two of you may interfere with each other.

It may be neccessary to remotely access one of the other Rivendell workstations. The proceedure is the same no matter which machine is accessed. It's just a bit faster on the Studio A - Rivendell 1 machine since it is the server.



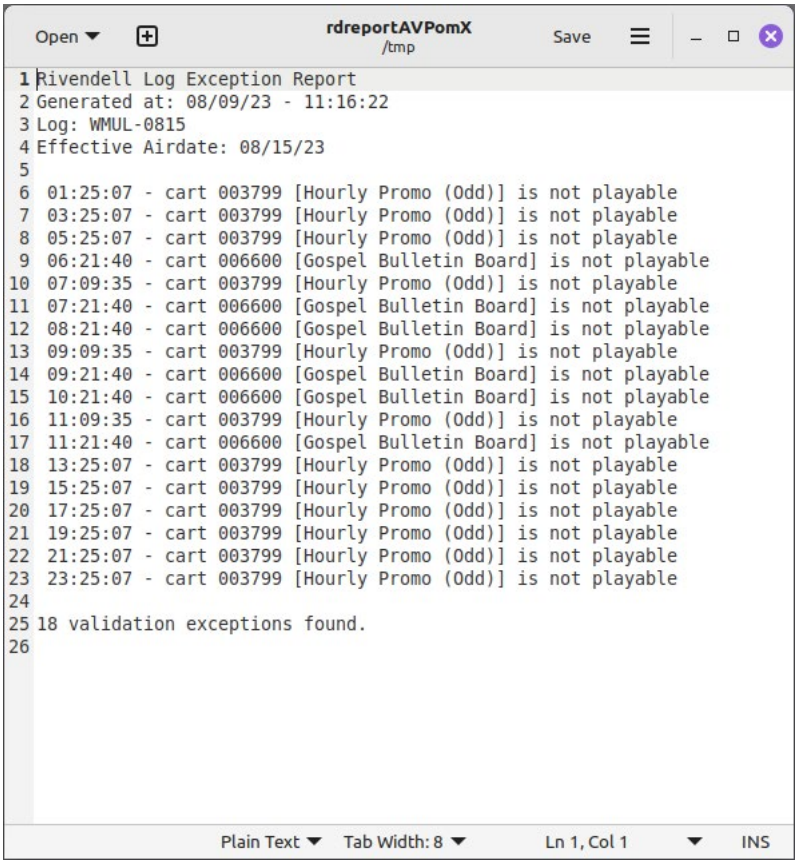
30. You will most likely want to use the workspace icon (1) to switch over to the second workspace. Switching to the second workspace will get the RD AirPlay and RD Library windows out of the way without closing or minimizing them.
31. Double-click on the "RDLogManager" icon on the desktop. The RD Log Manager window will appear. (next page, left)

Reader's Notes

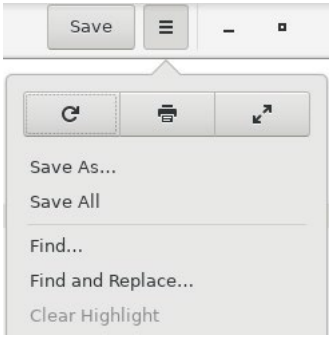


32. Click the "Generate Logs" button. The "RD Log Manager - Generate Log" window will appear. (Above, right)
33. Check that the service is "WMUL".
34. By default, the "Date" field will be set to tomorrow, even if there is already a log for tomorrow. Set the "Date" field to the date for which you are generating a log.
35. Click the "Create New Log" button. It will process for a moment and then display the "No Errors" dialog.
36. Click OK. The "No Errors" dialog will disappear and the "RD Log Manager - Generate Log" window will change. The "Merge Music" button will become active, the "Import Data: Available" icon will change to green, and the "Import Data: Merged" icon will change to red.
37. Click the "Merge Music" button. After a moment, a text editor will appear with the "Rivendell Log Exception Report". This document lists any songs that were in the schedule that cannot be played.

Reader's Notes



38. Review the Log Exception Report. It is normal for the "Gospel Bulletin Board" and for the "Hourly Promo"s to be unplayable. However, if any other songs are unplayable, save the report for the Digital Media Librarian, Music Director, or Production Director to review.
    a. Do NOT use the "Save" button at the top of the editor screen. That button will just save the file into a temp folder that is regularly purged by the operating system.
    b. Click the hamburger menu just to the right of the save button.



    c. Click "Save As..." The "Save As" dialog box will appear.
    d. Click "T-Operations_Storage" in the left side-bar.

Reader's Notes

e. Navigate to T-Operations_Storage/Automation/Log Exception Reports/ and save the file with the date of the log. In this case, 2023-05-26.txt .

39. Close the Log Exception Report. It will ask you if you wish to save the document. You have already "Save As"-ed it, but the original file in the temp folder is unsaved. That's OK, you no longer need it.
40. Click "Close without Saving".
41. Repeat steps 34-40 for each date that you are generating a music schedule.
42. Close out of the "RD Log Manager - Generate Log" window, the "RD Log Manager" window, and the "Studio A - Rivendell 1 - Veyon Remote Access" window.
43. Return to the "Natural Music - Veyon Remote Access" window.
44. Close "Natural Music".
45. Log out of the Natural Music VM.
46. Close the "Natural Music - Veyon Remote Access" window.

22.A.2.c. Quick Reference

1. Open "Veyon Master" and access the "Natural Music" VM.
2. Open "Natural Music 5" and click the "Logs" button.
3. Click "New". Select the appropriate day, clock grid and the "Rivendell" automation type. Click "Create". See 2.B.2. Selecting a Clock Grid on Page 19.
4. Check that the log is free of errors (top middle box).
5. Use the log statistics tab to check that each hour has between 65 and 75 minutes of music scheduled. Add, swap, or delete songs as needed. See 22.A.4. Inserting Additional Songs Into the Schedule on Page 17, See 22.A.3. Swapping a Song in the Schedule on Page 15, See 22.A.5. Deleting a Song from the Schedule on Page 17.
6. Click "Convert Log" | "Automation Log" and publish the log to the automation system.
7. Access the "Studio A - Rivendell 1" workstation.
8. Open "RD Log Manager" and select "Generate Logs".
9. Select the date and click "Create New Log.
10. Merge the music schedule into the log. Review and save the Log Exception Report.

22.A.3. Swapping a Song in the Schedule

Reader's Notes

22.A.3.a. Overview

Occasionally, the Traffic department may desire to swap a song in the music schedule before publishing it to the automation. For instance, to swap in a shorter or longer song by the same artist. Traffic selects a song to swap out, identifies the replacement song, and commands "Natural Music" to swap the songs.

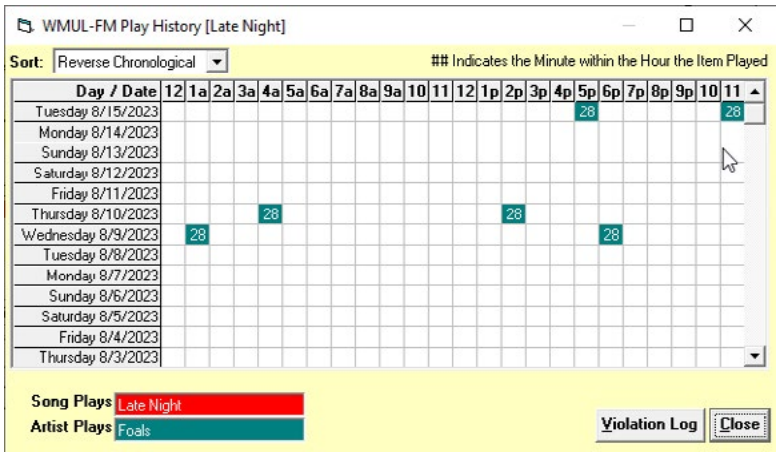
> LEGAL NOTE!
> Streaming rules prohibit playing more than two songs by the same artist back-to-back.

22.A.3.b. In Depth

1. Start on the "WMUL-FM Music Log Editor" Window. Locate and click on the song you wish to swap. The song will highlight in red.

2. Click on the "Alternate Songs" tab on the bottom half of the window, if it not already selected.
3. The "Alternate Songs" tab will display a list of songs in the same category. You can sort this list by clicking the appropriate column. You can also use the "Sort Alternate Songs by:" combobox.
4. You can also select a different category using the "Songs from Category:" combobox.
5. Sort and scroll through the list until you find a song you think may fit.
6. Highlight the song and double-click on it. The "WMUL-FM Play History [Song Title]" dialog box will appear. This screen can also accessed by clicking the "History" button. The "History" button is on the left side of the "Alternate Songs" tab.

Reader's Notes



7. This window presents you with a lot of information in a small area. The window is showing you when the artist and the song have been scheduled recently. It starts with the most recently scheduled date and displays up to forty-five (45) days into the past. Hours where the same artist has played will be in green. Hours where the same song has played will be in red. The number in the colored box indicates when in the hour the song played. In the above screenshot, the song "Late Nite" has not been scheduled within the previous 13 days. However, six other songs by "Foals" have played.
8. Once you have looked at this window and have decided whether to play this song, click the "Close" button.
9. If you want to select a different song, go back to step 6. If you want to use this song, click the "Use" button on the left side of the "Alternate Songs" tab.
10. Repeat this procedure for each song you wish to swap.

22.A.3.c. Quick Reference

1. Open the log editor and select the song you want to swap.
2. Use the Alternate Songs and History functions to identify a replacement song.
3. Click "Use" to swap the song in the playlist.

Reader's Notes

22.A.4. Inserting Additional Songs Into the Schedule

> LEGAL NOTE!
> Streaming rules prohibit playing more than two songs by the same artist back-to-back.

The procedure for inserting an additional song is the same as for swapping a song, but with three (3) extra steps at the start.

1. Start on the "WMUL-FM Music Log Editor" Window. Find the place where you wish to insert a new song. Highlight the song immediately after the place where you want to insert the new song.

> TIP!
> Do not attempt to insert a song immediately before the Legal ID. It will not work the way you think it will. The song will be inserted at the beginning of the hour of the Legal ID instead of at the end of the previous hour. Insert the new song one song earlier instead.

2. Click the "Insert" button on the top button bar. A new line will appear in the music schedule.
3. Select the desired category on the "Songs from Category …" combobox.
4. From this point, the procedure is the same as for swapping a song. Go to step 3 under 22.A.3. Swapping a Song in the Schedule on Page 15.

22.A.5. Deleting a Song from the Schedule

1. Start on the "WMUL-FM Music Log Editor" Window. Locate and click on the song you wish to delete. The song will highlight in red.
2. Click the "Delete" button in the button bar. The song will be deleted from that spot in the playlist.

22.A.6. Moving a Song within the Schedule

1. Start on the "WMUL-FM Music Log Editor" Window. Locate the song you wish to move.
2. Click and drag the song to where you wish to move it. The song will be moved in front of the song underneath the cursor.

Reader's Notes

22.B. Maintaining the Clocks

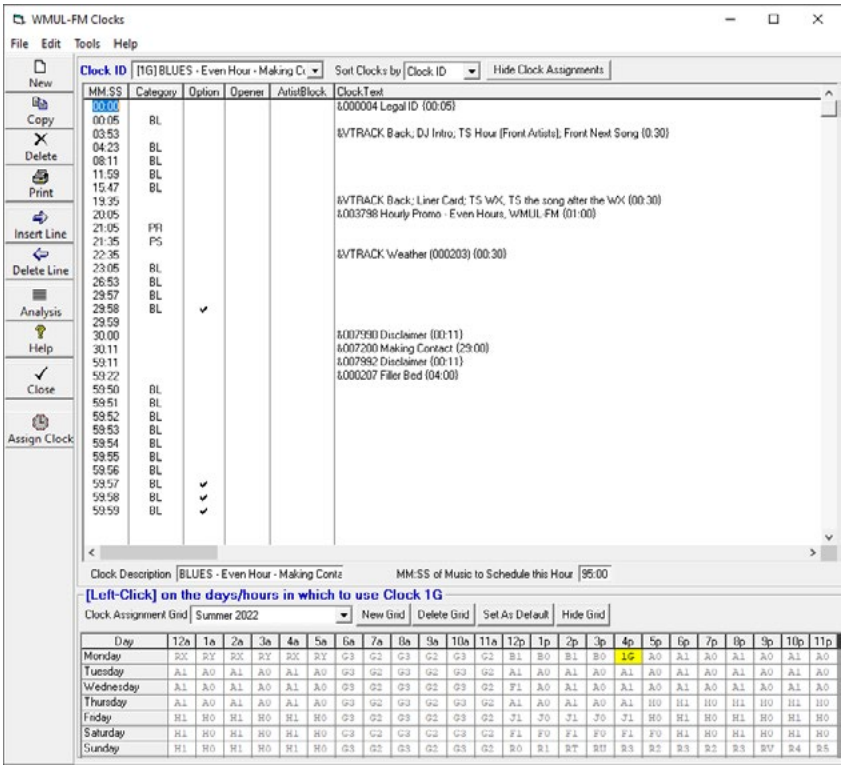
A "Clock" is a document describing the types and approximate start times of songs and other items during one hour of programming. As of this revision (August 2023), there are thirty-one (31) different clocks.

A "Clock Grid" is a document that maps the various clocks onto all the hours of the week. WMUL-FM uses four (4) clock grids as of this revision to this manual.

While initial set-up was a lot of work, on-going maintenance is not as time consuming.

22.B.1. The Clocks Window

All work on the clocks is done within the clocks window. From the main window, click "Setup" and then click "Clocks". The "WMUL-FM Clocks" page will appear.



The top 3/4 of the window is the clock itself with a button bar on the side. The bottom of the window is the clock grid. The program will highlight, in yellow, those hours of the currently selected clock grid to which the currently selected clock is assigned. It is difficult to see on the small screenshot, but the clock grid ("1G") is only assigned to the Monday 4 p.m. hour.

22.B.2. Selecting a Clock Grid

Reader's Notes

WMUL-FM currently uses four (4) different main clock grids. A fifth grid exists, but is not used and cannot be deleted. Specialized versions will be created for each semester. In alphabetical order, they are:

1. All-Day Christmas - Exactly what it says on the tin. Every hour of every day is nothing but Christmas music. For use on Christmas day, December 25th, only.
2. Break - For any day, outside of Christmastime, where the university is on break and Gospel operates in the morning. Generally, this clock will be used during the following times:
   - Thanksgiving break up to and including Thanksgiving Day
   - Winter break between December 26 and the start of spring classes
   - Spring Break
   - Spring Finals Week
   - Summer Break
3. Christmas Break - For any day during the Christmas break times where Gospel operates in the morning, and some amount of Christmas music is also scheduled (currently the noon hour). Generally, this clock will be used during the following times:
   - Thanksgiving break after Thanksgiving day
   - Fall Finals Week
   - Winter break up to Christmas day
4. Normal - Artifact of "Natural Music" - WMUL-FM does not use this clock grid but the program will not allow it to be deleted either.
5. Regular Schedule - The regular music schedule.

22.B.3. Modifying A Clock Grid

From time to time it will be necessary to modify the clock grid:

- To reflect format changes
- To insert special programming

1. Start from the "WMUL-FM Clocks" window.
2. Use the "Clock ID" combobox near the top to select the clock to be assigned. If a new clock is needed, See 22.B.5. Creating a New Clock from Scratch on Page 21 or See 2.B.6. Creating a New Clock from an Existing Clock on Page 22 and then return here.

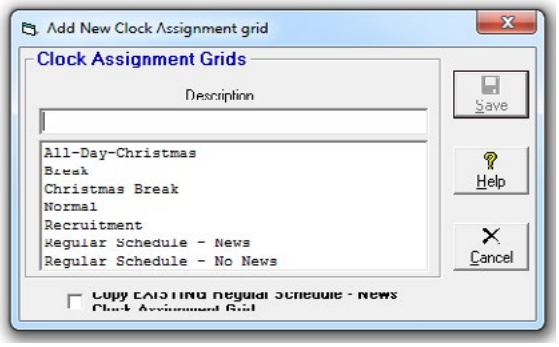
Reader's Notes

3. Use the "Clock Assignment Grid" in the bottom section of the window to select the clock grid to be modified.
4. For each hour to which the clock is to be assigned, click that hour in the grid.
5. Repeat this process for each clock and clock grid that needs to be modified. The progress made will be saved automatically as each modification is made.

22.B.4. Creating a New Clock Grid

You will usually create one new grid for each semester. This grid will be modifications of an existing grid. The modifications will reflect the changes unique to that semester. Changes such as special programs. Sometimes the Board of Directors may devise a new format which will require an entirely new grid.

1. Start from the "WMUL-FM Clocks" window.
2. If the new grid is based on an existing grid, select that clock grid. Use the "Clock Assignment Grid" combobox in the bottom section.
3. In the bottom section of the window, click the "New Grid" button. The "Add New Clock Assignment Grid" dialog box will appear.



4. Enter the name of the new grid in the "Description" textbox.
5. If the new grid is based on an existing grid, click the checkbox at the bottom. The label on the checkbox reads "COPY EXISTING {NAME} Clock Assignment Grid". The label looks weird because the programmers made the label the wrong size.
6. Click Save. The program will create the new grid and select it.
7. Modify the new grid as desired. (See 2.B.3. Modifying A Clock Grid on Page 19.)

22.B.5. Creating a New Clock from Scratch

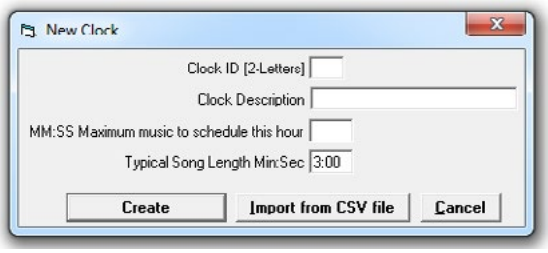
Reader's Notes

22.B.5.a. Overview

When the station needs an hour of programming different from the existing ones, it is time to create a new clock. If the new clock is significantly different from all the existing clocks, it may be easier to create the new clock from scratch. You will provide "Natural Music" with a two (2) character clock ID code, description, clock length, and average song length.

22.B.5.b. In Depth

1. Start from the "WMUL-FM Clocks" window.
2. Click the "New" button on the left side button bar. The "New Clock" dialog box will open.



3. Enter the two (2) character clock ID in the "Clock ID" textbox. The label says two (2) letters, but numbers are perfectly acceptable too. See 22.B.8. Clock ID Codes on Page 26 for information about the ID code to use.
4. Enter a description in the "Clock Description" textbox.
5. Enter "60:00" in the third textbox. You will change that number later. Entering a larger number here creates problems down the road.
6. The number that goes in the fourth box will depend on how many slots the clock needs. The program will use this number and the number in the third textbox to add the initial lines for songs. If you instruct the program to create a 60:00 minute clock with 2:00 minute songs, the program will create a clock with thirty (30) lines, spaced two (2) minutes apart.

   Use a song duration smaller than the actual average. A smaller duration means that the program will create more lines than you need for just the songs. Those extra lines are for the non-song entries. Non-song entries include Legal IDs, Promos, and Operator Notes.

Reader's Notes

Typically, a value of 2:00 or 2:30 should be in the ballpark. You will be able to add or delete lines later, but it is easier to let the program do 90 percent of the work.

7. Click "Create". The program will create a blank clock and select it.
8. Modify the clock as needed. Change the duration (usually to 70:00). See 22.B.7. Modifying a Clock on Page 23.

22.B.5.c. Quick Reference

1. Start from the "WMUL-FM Clocks" window and click "New".
2. Provide the two (2) character clock ID, description, duration (no more than 60:00), and average song length (usually 2:30). Click "Create". (22.B.8. Clock ID Codes, Page 26.)
3. Modify as needed. Change the duration to 70:00. (22.B.7. Modifying a Clock, Page 23.)

22.B.6. Creating a New Clock from an Existing Clock

When the new clock is mostly the same as an existing clock, it is easier to copy the existing clock and modify it.

1. Start from the "WMUL-FM Clocks" window.
2. Select the clock that is the basis of the new clock using the "Clock ID" combobox at the top.
3. Click the "Copy" button on the left size button bar. The "Copy Clock" dialog box will appear.

4. Enter a 2 character clock ID code in the first textbox and a more lengthy description in the second textbox. See 22.B.8. Clock ID Codes on Page 26 for information about the ID code to use.
5. Click "Copy". The program will copy the clock and select the copy.
6. Modify the clock as needed. See 22.B.7. Modifying a Clock on Page 23.

22.B.7. Modifying a Clock

Reader's Notes

1. Start from the "WMUL-FM Clocks" window.
2. Select the clock to be modified using the "Clock ID" combobox at the top.
3. Modify the clock as desired using the bullet points on this and the next three pages as a guide. The program will save your progress as you go.

22.B.7.a. Clock Modifications:

- Select a line by clicking the MM:SS time at the beginning of the line.
- Insert a new line on the clock by selecting the line immediately after where you want the new line to go. Then click the "Insert Line" button on the left. The line you selected will be pushed down and a new blank line with the same start time inserted and selected.
- Delete a line by selecting it and clicking the "Delete Line" button.
- You have to do the time calculations yourself. It does not have to be exact, but it does need to be close enough to get an accurate schedule.
    - Enter the time in MM:SS form.
    - The clock should start with 00:00.
    - No time can be greater than 59:59, for automation compatibility reasons.
    - When you reach the end of the hour, the final songs should count back from 59:59. E.G. The last song should be 59:59, the next to last 59:58, etc. Count backward in this way for any song that would be scheduled after 59:59.

52:10	JZ
57:00	JZ
59:56	JZ
59:57	JZ
59:58	JZ
59:59	JZ

    - The author has used two Android apps to assist in time-math. The apps are "Time Calculator" by Seneca Creek Software and "Mobi Calculator FREE" by Igor Polyakov. Both are free in the Google Play Store. Presumably, similar apps for iOS exist.

Reader's Notes

- Use the boxes under the "Category" column to assign a category to each song line. Each box is both a combobox and a textbox. Each combobox displays the categories and the beginning of each category's description. You can either type the two-character category code or use the combobox.
- If you click the box in the "Option" column, that will mark that song as optional. The software will not schedule a song in that slot if the "MM:SS of Music to Schedule this Hour" has been met.
- Leave the "Opener" box blank, because that feature is not used at this time.
- The "ArtistBlock" column is for creating blocks of songs by the same artist. The Music Director may want to create these blocks. Artist blocks may also be needed for music categories with a limited number of artists. "Natural Music 5" is configured with rules about artist separation. These rules help to create music schedules with diverse selections of artists. If a music category has too few artists ingested, the program may not be able to find a song that meets the rules. If the program is unable to find a song, it generates a log error for that slot.

LEGAL NOTE!
Streaming rules prohibit playing more than two songs by the same artist back-to-back.

  - To create an ArtistBlock, check each line of the music schedule that should be by the same artist.
  - You can create consecutive artist blocks with different artists. E.G. a two-fer by Artist1 and a second two-fer by Artist2. Place "[NewArtist]" in the "Clock Text" column of the first song by the second artist.

MM:SS	Category	Option	Opener	ArtistBlock	ClockText
40:32	RM			✔	
44:46	RM			✔	
49:00	RM			✔	[NewArtist]
53:14	RM			✔	

Reader's Notes

- Use the "Clock Text" field if you need one of the following special entries:
  - To send a note to the operator.
  - To send a command to the automation system
  - To create multiple, adjacent ArtistBlocks
- To send a note to the Operator:
  - Insert an ampersand followed immediately by the word NOTE in all caps, no space between the ampersand and the word "&NOTE"
  - Space
  - The text you want in the note.
  - The automation truncates the text after a certain point, so you may need to be terse or use multiple notes to get all the information to the Operator.
- To send a command to the automation system:
  - All automation system commands must start with an ampersand "&".
  - To play a specific item, use an ampersand followed by the six digit cart number "&000102". No space between the ampersand and the number.
  - E.G. "&000102" will play the cart 000102, which is the Legal ID "Marshall's Cutting Edge". You can enter a title text as when sending a note to the operator. You can also enter a scheduled duration by adding a space and the time in MM:SS format, surrounded by curly braces. E.G. "&000102 Legal ID {00:06}". Everything after the cart number is optional. If you enter a duration, "Natural Music 5" will use it when calculating how much music is in the hour. If you do not enter a duration, the software will count the entry as being zero seconds long.
  - To enter a voice-track slot, make an entry similar to note item above. Instead of using the word NOTE, you will use the string VTRACK. E.G. "&VTRACK Back; DJ Intro; TS Hour (Front Artists); Front Next Song {00:30}

Reader's Notes

22.B.8. Clock ID Codes

Each clock has a two (2) character ID code that uniquely identifies and partially explains it. For clocks IDs that start with a letter, the letter explains the general type of the clock. The next character is sequentially assigned beginning with 0-9 and continuing through A-Z.

A	Alternative	I	Unused
B	Blues	J	Jazz
C	Christmas	K-L	Unused
D-E	Unused	M	Metal
F	Flashback	N-Q	Unused
G	Gospel	R	The Rock
H	Hip-Hop / Streetbeat	S-Z	Unused

Clocks that start with a number are used when a specific day and time need a special clock. The first number indicates the day of the week. The second number indicates the hour of the day. E.G. Clock 1G is for Mondays at 4pm.

1	Monday	5	Friday
2	Tuesday	6	Saturday
3	Wednesday	7	Sunday
4	Thursday		

0	Midnight	C	Noon
1	1 a.m.	D	1 p.m.
2	2 a.m.	E	2 p.m.
3	3 a.m.	F	3 p.m.
4	4 a.m.	G	4 p.m.
5	5 a.m.	H	5 p.m.
6	6 a.m.	I	6 p.m.
7	7 a.m.	J	7 p.m.
8	8 a.m.	K	8 p.m.
9	9 a.m.	L	9 p.m.
A	10 a.m.	M	10 p.m.
B	11 a.m.	N	11 p.m.

22.C. How to Backup the Database

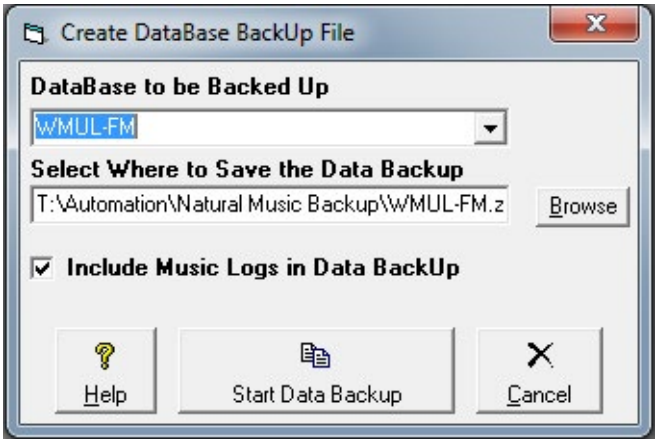
Reader's Notes

22.C.1. Overview

Backup the existing "Natural Music 5" database before importing new songs from the automation. The database dump from the automation may be corrupt, although this is unlikely. Backing up the Natural Music 5 database protects the station against a corrupt dump from the automation system database. Name the backup based on the day's date and save it in the Automation folder.

22.C.2. In Depth

1. Start from the main "Natural Music" window.
2. Click the "Data" menu, and then "Backup". The "Create DataBase BackUp File" dialog box will appear.



3. The "DataBase to be Backed Up" should always be "WMUL-FM".
4. In the "Select Where …" textbox, the path should be T:\Automation\Natural Music Backup\ .
5. Change the filename to "WMUL-FM YYYY-MM-DD.zip". Use the sequence YYYY-MM-DD and make use of leading zeros (E.G. "01" not just "1"). Using this format keeps the files in order.
6. Click the "Start Data Backup" button. The "Create DataBase BackUp File" dialog will change to show the progress.
7. When the backup is complete, a "Done" messagebox will appear. Click "OK" and the program will return you to the main window.

22.C.3. Quick-Reference

1. Click "Data" | "Backup".
2. The database is "WMUL-FM". The folder is "T:\Automation\Natural Music Backup\". The filename is "WMUL-FM YY-MM-DD.zip".

Reader's Notes

22.D. How to Re-Synchronize with the Automation Database

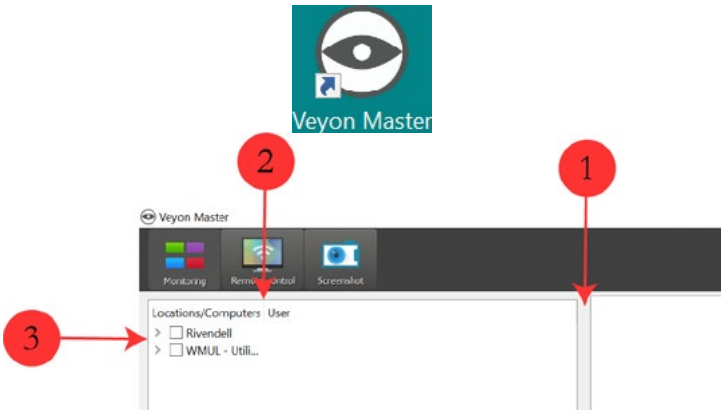
22.D.1. Overview

The "Natural Music" database becomes de-synchronized as people add or delete items from the automation system. Each week, the Digital Media Librarian must re-synchronize the databases. The DML first exports the automation system's database. The export will be a complete listing of all the items in the automation system. The exported database must then be filtered by a helper program.

The filtered database must then be imported into "Natural Music".

22.D.2. In Depth

1. Log in to the Traffic Director's computer or Music Director's computer.
2. Double-click on "Veyon Master" on the desktop or in the start menu. The "Veyon Master" window will appear. Veyon is the software that allows the Traffic Director and Digital Media Librarian to access the Virtual Machine (VM) that runs "Natural Music 5" and to remotely access the automation workstations.



3. When the window first appears, it may be necessary to drag the bar (1) separating the sidebar from the main window and then the bar (2) separating the "Locations / Computers" column from the "User" column to the right to make room on the display..
4. If needed, click the right-pointing caret ">" (3) to expand the two groups. This is a list of the six (6) Rivendell workstations in the studio complex and the Virtual Machine running Natural Music.

Reader's Notes

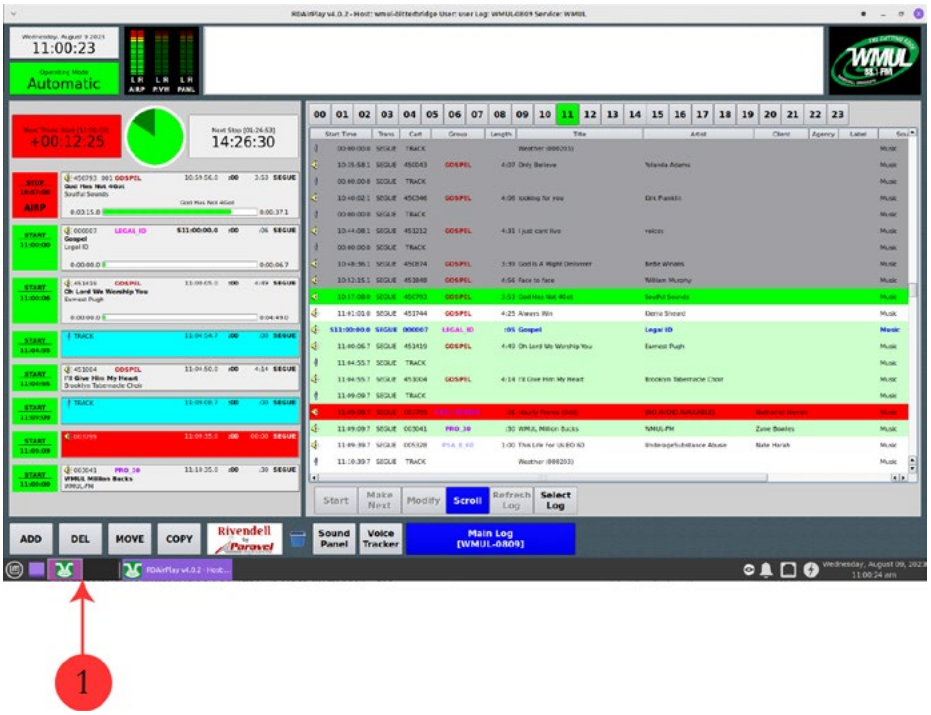
5. Click the box next to "Studio A - Rivendell 1 [Bitterbridge]". A thumbnail showing the display of that machine will appear in the right-hand window pane.
6. Right-click on the thumbnail and select "Remote Control". A window will open that shows the display and allows the operator to use the remote computer. This remote control screen runs in the local session, the same as if the operator were sitting at the keyboard and monitor. You may need to give the remote connection up to 30 seconds to settle down and become stable.

NOTICE

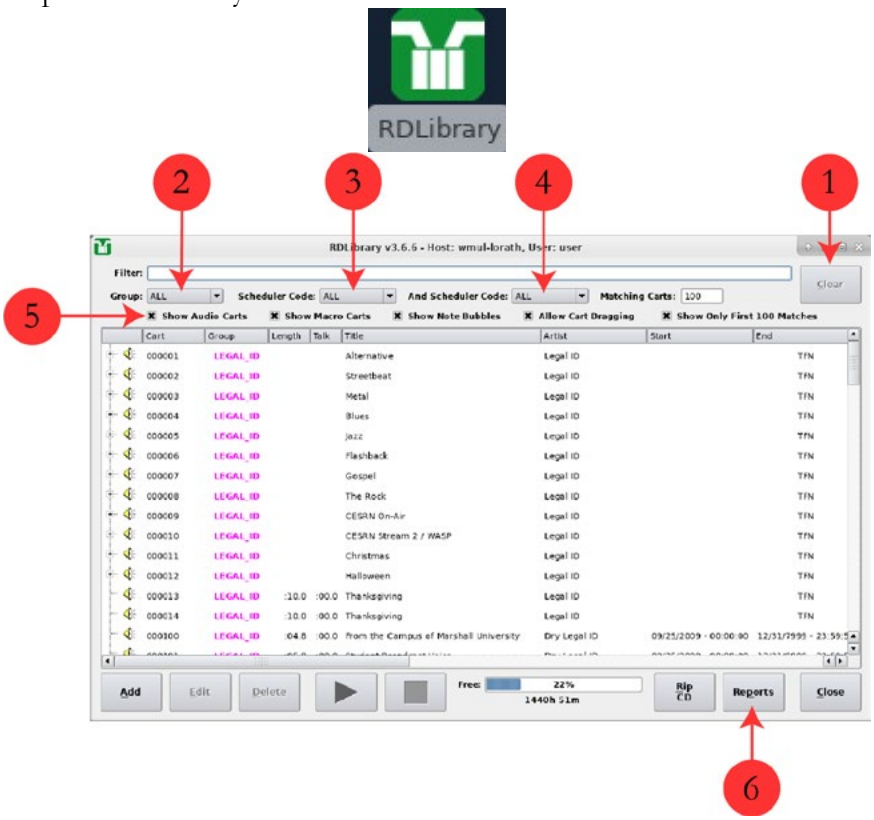
All remote access users and the local user see the same screen. If a DJ is already using the Studio A - Rivendell 1 machine, the two of you may interfere with each other.

It may be neccessary to remotely access one of the other Rivendell workstations. The proceedure is the same no matter which machine is accessed. It's just a bit faster on the Studio A - Rivendell 1 machine since it is the server.

Reader's Notes



7. You will most likely want to use the workspace icon (1) to switch over to the second workspace. Switching to the second workspace will get the RD AirPlay and RD Library windows out of the way without closing or minimizing them.
8. Open "RDLibrary".



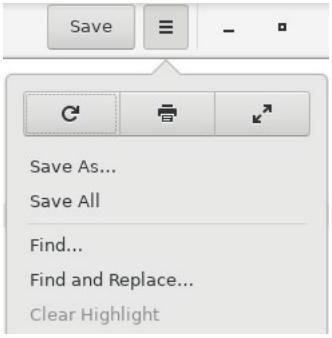
Reader's Notes

9. Click the "Clear" button (1) on the upper right-hand side.
10. Make certain that the "Group:" (2), "Scheduler Code:" (3), and "And Scheduler Code:" (4) comboboxes are all set to "ALL".
11. Make certain that the "Show Audio Carts" (5) box is checked.

EXPLANATION

Steps 9-11 make certain that ALL of the audio carts are present when the database is exported. If the "Group:" field was set to "ALTERNATIV", then only the "ALTERNATIV" carts would be exported.

12. Click the "Reports" button (6). The "RDLibrary - Select Report" dialog box will appear.
13. Change the "Type" to "Cart Data Dump (CSV)".
14. Make certain that "Prepend Field Names" is checked.
15. Click the "Generate" button. After five or ten (5-10) seconds, a text editor will appear with the database export.
16. Save the database export.
    a. Do NOT use the "Save" button at the top of the editor screen. That button will just save the file into a temp folder that is regularly purged by the operating system.



    b. Click the hamburger menu just to the right of the save button.
    c. Click "Save As..." The "Save As" dialog box will appear.
    d. Click "T-Operations_Storage" in the left side-bar.
    e. Navigate to T-Operations_Storage/Automation/ .
    f. Single-click the file cart_report_from_rivendell.csv and then click the "Save" button. A dialog box will appear asking you to confirm that you wish to replace the existing file.

Reader's Notes

g. Click the "Replace" button. The old database export will be overwritten. It will take two or three (2-3) seconds to save the large file.

17. Close the text editor. It will ask you if you wish to save the document. You have already "Save As"-ed it, but the original file in the temp folder is unsaved. That's OK, you no longer need it.
18. Click "Close without Saving".
19. Click "Close" on the "RDLibrary - Select Report" window.
20. Close RDLibrary.
21. Go back to the "Veyon Master" window.
22. Click the box next to "Natural Music [Lys]". A thumbnail showing the display of that machine will appear in the right-hand window pane.
23. Right-click on the thumbnail and select "Remote Control"

REMINDER

All remote access users and the local user see the same screen. If you access the Natural Music VM at the same time as the Music Director, you will each see what the other is doing and may interfere with each other.

Be prepared to communicate with the Music Director when accessing the Natural Music VM.

24. Log in to the Natural Music VM using the wmul credentials. You may need to give the remote connection up to 30 seconds to settle down and become stable.
25. Double-click on the "Convert Rivendell to Natural Music.bat" icon on the desktop. A Windows cmd.exe window will appear. After a few seconds, it will say "Press any key to continue...".

26. Press the space bar to close out the window.

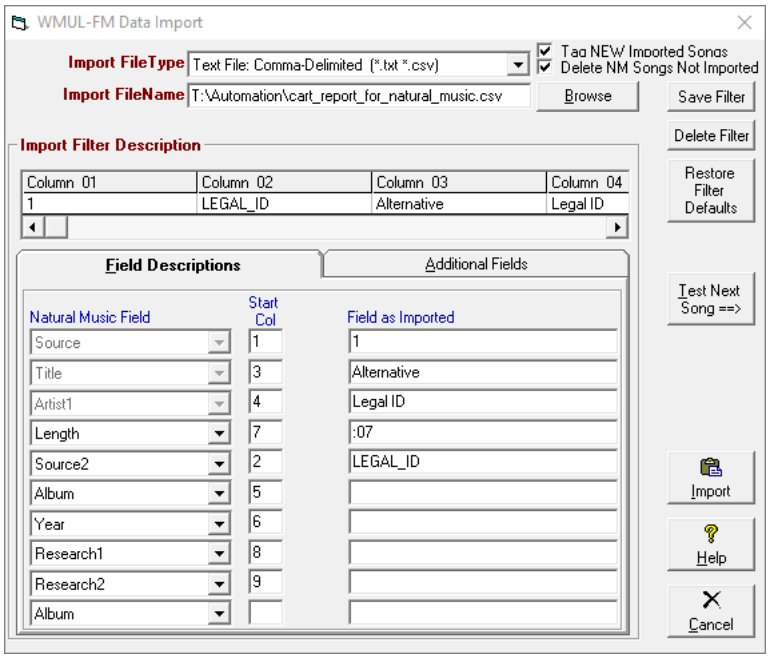
Reader's Notes

EXPLANATION

This icon runs a helper program that filters out unused columns of data (such as the "Composer" field), and non-music groups (such as News and the many Sports groups). The program then saves the filtered database as T-Operations_Storage/Automation/cart_report_for_natural_music.csv .

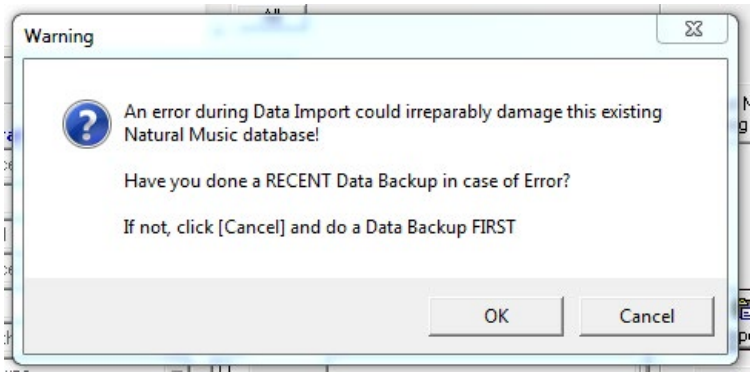
27. Double-click on the "Natural Music 5" icon on the desktop of the Natural Music VM. The program will load.

28. You may be asked to select which database to use. (This generally only happens the first time you open the program.) Select "WMUL-FM" and click "Open".
29. Execute a database backup. See 22.C. How to Backup the Database on Page 27.
30. Click the "Data" menu and then the "Import" menu-item. The "WMUL-FM Data Import" dialog box will appear.



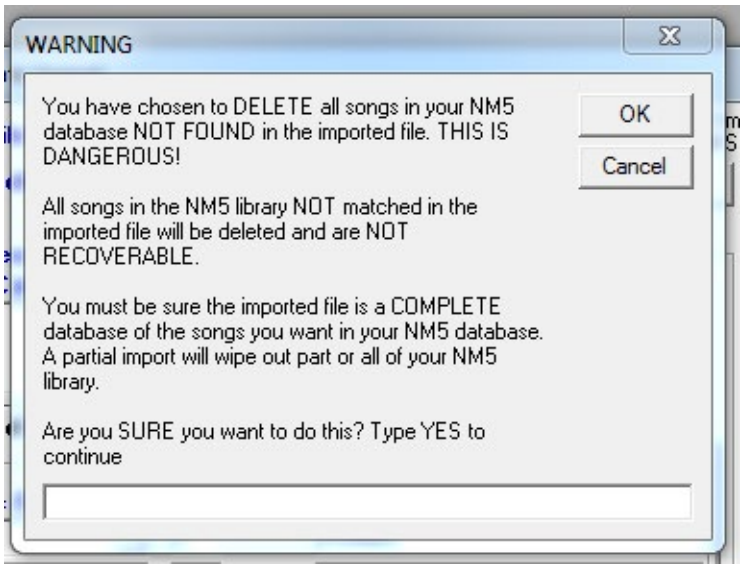
Reader's Notes

31. The settings on this dialog should be correct, but double-check.
    a. "Import FileType:" should be "Text File: Comma-Delimited (*.txt, *.csv)".
    b. "Import FileName:" should be T-Operations_Storage/Automation/cart_report_for_natural_music.csv .
    c. "Tag NEW Imported Songs" and "Delete NM Songs Not Imported" should both be checked.
    d. The data in the right column, "Field as Imported", should look like the above screenshot.
32. Click the "Import" button. A hassle-box will pop up. The box warns you that, if the file you are importing is corrupt, then importing it will also corrupt the Natural Music database. It recommends that you backup the database. You just backed up the database in Step 29. Even if you were to click "Cancel", perform another backup, and come back to this window, it would again ask you if you have done a recent data backup.



33. Click "OK" on the first hassle-box. A second hassle-box will appear. The computer thinks you were lying the first time. Ignore this dialog box. You have just performed a complete backup (in Step 29).
34. You actually have to type in the word "YES" in the provided textbox and click "OK". The computer FINALLY does what you told it to do. A progress bar will appear for a minute or so.

Reader's Notes



35. If "Natural Music" could not process any of the entries from the automation, an error box will appear. Click "Yes". The "Data Import Errors" dialog will appear with a list of bad records.
36. Click "Export". A "Save As..." dialog will appear.
37. Save the file in T:\Automation\Natural Music Errors\ use the date as the filename.

EXPLANATION

The Digital Media Librarian will need to go into RD Library and make corrections to these songs. For now, it is okay to proceed without the corrections. Generally, "Natural Music" will only reject an entry if it is missing either the Artist or Title.

38. Close the "Data Import Errors" dialog box.
39. The summary window will appear if "Natural Music 5" found no errors. The summary window will also appear when you have finished looking at the list of errors. It tells you how many total items were imported, how many already existed, how many are new, and how many were deleted.
40. Click "OK". You will be returned to the "Natural Music" main window.
41. Proceed to the next chapter, 22.E. Categorizing Songs on Page 36 to categorize the new database entries.

Reader's Notes

22.E. Categorizing Songs

"Rivendell Radio Automation" uses Groups along with Scheduler Codes to organize the library, while "Natural Music" uses two (2) character category codes. New songs that have just been synchronized into the Natural Music database need to be categorized. It is also neccesary to re-categorize some songs as they age.

Each Rivendell group corresponds to several Natural Music categories. The Scheduler Codes tell you into which Natural Music category each song should be categorized. Each group is broken down into New, Main, Classic and Flashback categories, depening on how old the song is.

Category Name	Time-Frame
New	< 6 months
Main	6 months to 5 years
Classic	5 years to 10 years
Flashback	>10 years

Use the Scheduler Codes to determine how old a song is and thus, into which category it should be sorted.

Rivendell Group	Natural Music Groups	Description
ALTERNATIV	AN AT AC AF	Alternative - New Alternative - Main Alternative - Classic Alternative - Flashback
ALT_IMAGE	AI	Alternative - Imaging
BLUES	BL	Blues Music
BLU_IMAGE	BI	Blues - Imaging

Rivendell Group	Natural Music Groups	Description
CHRISTMAS	XA	Christmas - Alternative
	XB	Christmas - Blues
	XC	Christmas - Choirs / Groups
	XF	Christmas - Flashback
	XG	Christmas - Gospel
	XH	Christmas - Hip-Hop / Streetbeat
	XJ	Christmas - Jazz
	XM	Christmas - Metal
	XP	Christmas - Pop (Younger Than 10 years)
	XR	Christmas - The Rock
	XS	Christmas - Unsorted
	XT	Christmas - Traditional
XMAS_IMAGE	XI	Christmas - Imaging
FLASHBACK	F5	Flashback - 1950s
	F6	Flashback - 1960s
	F7	Flashback - 1970s
	F8	Flashback - 1980s
	F9	Flashback - 1990s
	F0	Flashback - 2000s
	F1	Flashback - 2010s
FLA_IMAGE	FI	Flashback - Imaging
GOSPEL	GP	Gospel Music
GOSP_IMAGE	GI	Gospel - Imaging
JAZZ	JZ	Jazz Music
JAZZ_IMAGE	JI	Jazz - Imaging
LEGAL_ID	LI	Legal IDs
METAL	MN	Metal - New
	MT	Metal - Main
	MC	Metal - Classic
	MF	Metal - Flashback
MTL_IMAGE	MI	Metal - Imaging
PRO_30 PRO_60 PRO_ODD	PR	Promos

Reader's Notes

Reader's Notes

Rivendell Group	Natural Music Groups	Description
PSA_E_30 PSA_E_60 PSA_E_ODD PSA_H_30 PSA_H_60 PSA_H_ODD	PS	Public Service Announcements
RK_APOLGTX	RA	The Rock - Apologetix
RK_CLS_MTL	RH	The Rock - Classic Metal
RK_CONTEMP	RC	The Rock - Contempo
RK_LIVE	RL	The Rock - Live
RK_METAL	RM	The Rock - Metal
RK_PRAISE	RP	The Rock - Praise and Worship
RK_ROCK	RR	The Rock - Rock
RK_URBAN	RU	The Rock - Urban
ROCK_IMAGE	RI	The Rock - Imaging
STREETBEAT	HN HH HC HF	Hip-Hop - New Hip-Hop - Main Hip-Hop - Classic Hip-Hop - Flashback
STBT_IMAGE	HI	Hip-Hop - Imaging

Some songs are "extreme duration", meaning extremely short or extremely long. The exact value will vary from master category to master category. An extremely long song for Alternative may not be extremely long for Jazz. "Natural Music" has special categories for these extreme duration songs. The category is the same starting letter, followed by an "X". (Jazz - Extreme Duration is JX.)

As of the writing of this manual (August 2023), the extreme durations were as follows:

Reader's Notes

Format	Extremely Short	Extremely Long
Alternative Blues Gospel Streetbeat / Hip-Hop The Rock	< 2:30	> 7:00
Flashback: F5 Flashback: Other	< 1:30 < 2:00	> 5:00 > 6:30
Jazz	< 2:30	> 8:00

22.E.1. How to Categorize Songs

1. From the "Natural Music" main window, click "Music-Library" and then "Song Browser". The "Song Browser" window will appear.
   The Natural Music categories are listed to the side and the songs in that category are in the main area. By default, the window displays "All Songs".

2. Scroll to the bottom of the list of categories and click "UnCategorized Songs". The main area will update to show only the uncategorized songs.
3. The first column in the main area is the Rivendell Group, labeled as "Source2", the third column contains the Rivendell Scheduler Codes, labeled as "Research2".
4. Highlight a group of songs that go into the same Natural Music category by clicking the first song, holding "Shift" and then clicking the last song, inclusively.

Reader's Notes

REMINDER

The Natural Music category is determined by the combination of the Rivendell Group and the Rivendell Scheduler Codes.

5. Once you have highlighted a group of songs, click and drag the songs into the appropriate category in the sidebar. The data in the "Category" column will change to the new category into which the songs have been placed. The songs will remain on this screen until it is refreshed.
6. Repeat steps 4 and 5 until all new songs are categorized.

22.E.2. Recategorizing Extreme Duration Songs

1. Navigate to the Natural Music category in which you will be working.
2. Click the "Length" column header to sort by that column.
3. Drag and drop songs from this category into the extreme duration category.

NOTICE!

Natural Music sorts long songs weirdly.

Songs that are 10-19 minutes are sorted between the 1:59 songs and the 2:00 songs. I.E. it will display a 1:59 song, followed by a 10:00 song, followed by a 2:00 song.

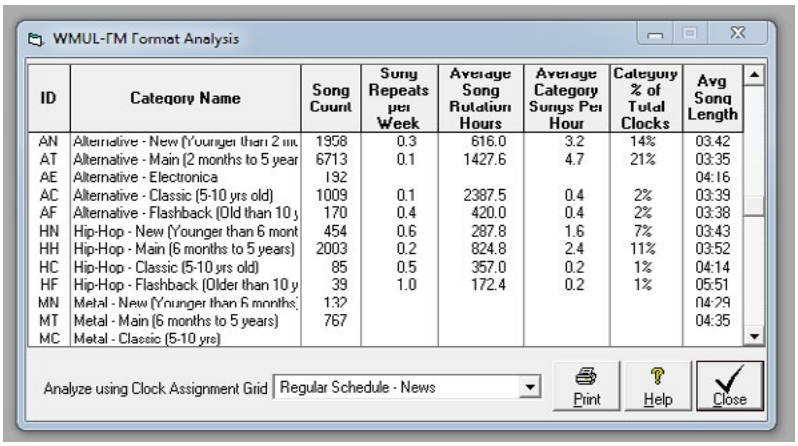
20-29 minute songs are similarly sorted between 2:59 and 3:00, etc.

22.F. Retrieving Database Statistics

Reader's Notes

"Natural Music" has several windows of statistics about the database. The most relevant window is "Format Analysis". The "Format Analysis" window provides statistical details about the various categories.

1. From the "Natural Music" main window, click on "Tools" > "Format Analysis". The "Format Analysis" window will appear.



2. Use the "Analyze using Clock Assignment Grid" combobox to select different clock grids. Different grids may have different values for columns four through seven (4-7).
3. It may be necessary to use the scrollbar to find the categories.

Reader's Notes

23. Operator Logs - "Behind the Scenes"

WMUL-FM utilizes a webapp for the operator logs that each operator completes during each airshift. The webapp has four main sections: operator sign-on / sign-off, program log, meter readings, and the daily EAS receiver check. The sign-on / sign-off provides a record of when an operator's airshift began and ended. The program log provides a record of what type of programming the operator produced. The meter eeadings provides a record of transmitter power. The daily EAS receiver check records the operational status of WMUL-FM's EAS Receiver.

23.A. How to Complete the Logs

Detailed instructions for how DJ's should complete the logs are contained in The WMUL-FM Operations Manaul - Volume II, Part 8. The August 2023 Edition is a 161 page book with a picture of a drum kit on the cover. Part 8 begins on page 27.

The rest of this part will cover the "behind the scenes" parts that require the Traffic Director's attention.

HISTORICAL NOTE

The station has revised the design of the logs several times in the past few years. Before the January 2012 Revision (J12), the station used a vastly different logging system. The only remains of this old logging system are in the logs used by JMC 231 students for the game engineering assignment.

The most recent change was to convert the logs to digital using the WMUL-FM Logs Webapp.

Reader's Notes

23.B. Checking the Operator Logs

1. Open T:\Traffic\Log Error Notes.docx . This document lists the names and relevant information about any noted log errors. When noting errors, write a brief note about the error in the "Error" column. The note only needs to provide enough detail that you or the next Traffic Director will know where to look for the problem.
2. Open a web browser and navigate to wmul-log.marshall.edu .
3. In the upper, right-hand corner of the page, click on the bentu menu. The page that appear will allow you to log into the application. (Logging into the app is different from signing onto the log.)

4. Log into the application using you username and password. See the Operations Manager if you do not know your credentials. The various pages are explained in the next chapter. See 23.C. The WMUL-FM Logs App on Page 46.
5. Click on the "Full Log" tab. Check that each operator has recorded a program log and all required meter readings. A meter reading is due every hour between :50 and :59 in the hour. Make a note of any missing programs or meter readings.
6. Click on the "Operators" tab. Look at the "Incomplete Operators" table and add those names, dates, and times to the "Log Error Notes" document. Note that, when a DJ is currently signed on, they will appear in this list too. Check the date and time to make certain that you are not recording an error for a DJ who is still in the studio.
7. Click the "Programs" tab. Any incomplete programs will be listed at the top. Make a note of those.
8. Click the "Meter Readings" tab. Make certain that all the ERP readings are between 1240 and 1470. If any readings exceed those values, make certain that the operator recorded an adjustment.
9. Click on the "Receiver Checks" tab and make certain that there is a receiver check for each day that an operator signed on.

23.B.1. Types of Errors

Reader's Notes

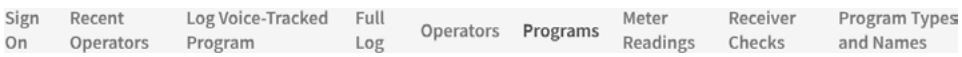
1. Forgetting to Sign off
2. Forgetting to perform all required checks:
    a. Program Log
    b. Meter Readings
    c. EAS Receiver Check
3. Performing any logging while a previous operator is still signed on.
4. Having more than one operator signed on at a time. Even if two or more people work as a team, only one of them is officially in charge.

Reader's Notes

23.C. The WMUL-FM Logs App

In July 2023, WMUL-FM began using a in-house webapp for the logs. It can be found at wmul-log.marshall.edu . The pages that the DJs interact with are documented thoroughly in Volume II, Part 8, beginning on page 28.

1. Log into the application using you username and password. See the Operations Manager if you do not know your credentials.
2. Once you are logged into the app, numerous additional tabs will be available at the top of the screen.



3. The first three: "Sign On", "Recent Operators", and "Log Voice-Tracked Program" are the same tabs that appear even when not logged in.
   a. **Full Log:** Displays each operator's logs. Each operator's sign on and sign off information, the program logs they recorded, and the meter readings they recorded. See 23.C.1. Full Log on Page 46.
   b. **Operators:** Shows a table of each operator and their sign on and sign off. See 23.C.2. Operators on Page 47.
   c. **Programs:** Shows a table of all of the program log entries. See 23.C.3. Programs on Page 48.
   d. **Meter Readings:** Shows a table of all of the meter readings. See 23.C.4. Meter Readings on Page 50.
   e. **Receiver Checks:** Shows a table of all of the EAS Receiver Checks. See 23.C.5. Receiver Checks on Page 51.
   f. **Program Types and Names:** A page where you can add or remove the program types and names that are used on the Programs tab. See 23.C.6. Program Types and Names on Page 52.

23.C.1. Full Log

This page displays the full log for each operator. Each operator's sign on and sign off information is displayed at the top, then the operator's program log entries, then the meter readings. This page can only display four (4) operators at a time. Click the Page caret buttons "<" and ">" at the very bottom of the page to see more operators. (The buttons to page through the operators are the ones outside the black outlines.)

Reader's Notes

Click the "Edit Operator Entry" to be taken to the "View / Edit Operator Entry" page for that operator.

Click a program log entry to be taken to the "View / Edit Program Log Entry" page for that log entry.

Click a meter reading to be taken to the "View / Edit Meter Reading" page for that meter reading.

23.C.2. Operators

There are two tables on this page: "Incomplete Operators" and "Complete Operator".

23.C.2.a. Incomplete Operators

The top table is "Incomplete Operators". It lists all of the operators who have signed on, but not off of the log. It is similar to the "Recent Operators" page, except that this table lists all the incomplete operators. The "Recent Operators" page only lists those from the previous eighteen (18) hours.

Note that, if a DJ is currently signed on, they will appear in this table.

The table displays an entry for each incomplete operator. The "Signature On", "Date On", and "Time On" fields display the information typed in by the operator. The "Signon Datetime Stamp" field contains the actual date and time that the operator clicked "Sign On". This information is automatically recorded by the app.

There are three search fields at the top that will allow you to narrow the list by "Signature On", "Date On", or "Time On".

Click the Page caret buttons "<" and ">" to navigate between table pages when there are numerous incomplete operators.

Click on an entry to be taken to the main logging page for that operator. This page is explained in Volume II, 8.A.2. The Main Logging Page.

23.C.2.b. Complete Operators

The bottom table is "Complete Operators". It lists the information for all of the operators who have completed both of those steps.

The table displays an entry for each operator. Click on an entry to be taken to the "View / Edit Operator Entry" page for that operator.

The following fields contain the information as it was entered by the operator:

- Signature On
- Signature Off

Reader's Notes

- Date On
- Time On
- Date Off
- Time Off

The following fields contain information that was automatically generated by the app:

- **Signon Datetime Stamp:** The actual date and time that the operator clicked "Sign On".
- **Signoff Datetime Stamp:** The actual date and time that the operator clicked "Sign Off".
- **Action By:** If this is blank (and it usually will be), then the most recent revision to this entry was made when no user was logged into the app. This will be the normal case because the DJs do not log into the app. If the operator has to correct their information later, this field will display the e-mail address of the Traffic Director or traffic assistant who was logged into the app when the correction was made.
- **Action At:** This is the date and time stamp of the most recent revision to this entry.

Five search fields at the top that allow you to narrow the list by "Signature On", "Date On", "Time On", "Date Off", or "Time Off".

23.C.2.c. View / Edit Operator Entry

This top of this page shows the current information for this operator entry as well as all previous revisions.

The bottom of the page allows the signed in user to revise the "Signature Off", "Date On", "Time On", "Date Off", and "Time Off" fields. The "Signature On" is tied into too many other parts of the logs to be changeable.

23.C.3. Programs

This page also has two tables: "Incomplete Programs" and "Complete Programs".

23.C.3.a. Incomplete Programs

The top table is "Incomplete Programs". It lists all of the program log entrys that have been started, but not ended.

The following fields contain the information as it was entered by the operator:

- Signature On

Reader's Notes

- Start Date
- Start Time
- Program Type
- Program Name
- Program Text

The following fields contain information that was automatically generated by the app:

- **Action By:** If this is blank (and it usually will be), then the most recent revision to this entry was made when no user was logged into the app. This will be the normal case because the DJs do not log into the app. If the log entry is changed later, this field will display the e-mail address of the Traffic Director or traffic assistant who was logged into the app when the correction was made.
- **Action At:** This is the date and time stamp of the most recent revision to this entry.

Click on an entry to be taken to the "View / Edit Program Log Entry" page for that log entry.

23.C.3.b. Complete Programs

The bottom table is "Complete Operators". It lists the information for all of the operators who have completed both of those steps.

The table displays an entry for each program log. Click on an entry to be taken to the "View / Edit Program Log Entry" page for that log entry.

All of the fields in the Incomplete Programs table are also present in the Complete Programs table. Three additional fields are also included. The "End Date" and "End Time" fields contain the information as it was entered by the operator. The "Voice Tracked" checkbox is recorded automatically by the app depending on whether the operator entered the program log entry on "The Main Logging Page" or on the "Log Voice-Tracked Program" page.

Five search fields at the top allow you to narrow the list by "Signature", "Start Date", "Program Type", "Program Name", and "Program Text".

Reader's Notes

23.C.3.c. View / Edit Program Log Entry

The top of this page shows the current information about this program log entry as well as all previous revisions.

The bottom of this page allows the signed in user to revise the "Start Date", "Start Time", "Program Type", "Program Name", "Additional Text", "End Date", and "End Time" fields.

The "Attach to Different Operator" button allows the signed in user to move this program log entry over to a different operator. That might be required if a DJ makes their program log entry while another operator is still signed on.

If you need to both "Attach to Different Operator" and make other changes to the log entry, you must do those two actions as separate steps. Both changes cannot be made as one step.

23.C.4. Meter Readings

This page displays a table of every meter reading. Click on an entry to be taken to the "View / Edit Meter Reading" page.

The following fields contain the information as it was entered by the operator:

- Signature
- Temperature Room
- Plate Voltage
- Plate Current
- Effective Radiated Power
- Notes

The following fields contain information that was automatically generated by the app:

- **Datetime Stamp:** The date and time stamp when the reading was originally recorded.
- **Action By:** If this is blank (and it usually will be), then the most recent revision to this reading was made when no user was logged into the app. This will be the normal case because the DJs do not log into the app. If the reading is changed later, this field will display the e-mail address of the Traffic Director or traffic assistant who was logged into the app when the correction was made.

Reader's Notes

- **Action At:** This is the date and time stamp of the most recent revision to this reading.

A search field at the top allow you to narrow the list down by "Signature".

23.C.4.a. View / Edit Meter Readings

The top of this page shows the current information about this meter reeading as well as all previous revisions.

The bottom of this page allows the signed in user to revise the "Temperature Room", "Plate Voltage", "Plate Current", "Effective Radiated Power", and "Notes" fields.

The "Attach to Different Operator" button allows the signed in user to move this meter reading over to a different operator. That might be required if a DJ takes a meter reading while another operator is still signed on.

If you need to both "Attach to Different Operator" and make other changes to the log entry, you must do those two actions as separate steps. Both changes cannot be made as one step.

23.C.5. Receiver Checks

This page lists all of the EAS Receiver Checks that have been recorded.

The following fields contain the information as it was entered by the operator:

- Signature
- Channel 1 (Working / Not Working)
- Channel 2 (Working / Not Working)
- Channel 3 (Working / Not Working)
- Notes

The following fields contain information that was automatically generated by the app:

- **Action By:** If this is blank (and it usually will be), then this receiver check was recorded when no user was logged into the app. This will be the normal case because the DJs do not log into the app.
- **Action At:** This is the date and time stamp when the receiver check was recorded.

Four search fields at the top allow you to narrow the list down by "Signature", "Channel 1" (Working / Not Working), "Channel 2" (Working / Not Working), and "Channel 3" (Working / Not Working).

These entries cannot be edited; therefore, there is no "View / Edit" page.

Reader’s Notes

23.C.6. Program Types and Names

This purpose of this page is different from all of the others. This page allows you to add, delete, or change the “Program Type”s and “Program Name”s that appear when completing the program log.

Note that changes and deletions made to the “Program Type”s only effect newly created Program Names. Any existing names will be unchanged. E.G. You have a program type of “News” and a program name of “News | Newscenter 88”. If you change “News” to “Newscast”, the program name will remain “News | Newscenter 88” unless you directly change that entry as well.

Note that changes and deletions made to the “Program Name”s only effect newly created Program Log entries. Any existing entries will be unchanged. E.G. You have a program name of “News | Newscenter 88” and an entry for February 3, 2023 5:00 PM to 5:30 PM, “News | Newscenter 88”. If you change “Newscenter 88” to “Newscenter 88 at 5PM”, the program log entry for February 03, 2023 will remain “News | Newscenter 88” unless you directly change that entry as well. It is not recommended to do that.

23.D. Checking Absences

Reader's Notes

After you have checked the logs, the next step is to check the absences. Special programming may interrupt some programs. Do not count an operator absent if special programming cancels:

- More than half of a multi-hour airshift
- Fifteen (15) minutes or more of a one-hour airshift

Be generous with those who have airshifts after variable length events such as play-by-play of sporting events.

1. Compare the names and programs listed on the log to those on the On-Air Schedule. A name on the On-Air Schedule but no corresponding entry on the logs indicates either an absence or a logging failure.
2. Check the Skimmer. You are looking for two things:
    a. Check the \Microphone folder at any time where there was someone scheduled, but no log entries.
    b. Also check \Microphone folder for any instances where someone opened the microphone when no-one was scheduled and no log entry was made.

23.D.1. The Skimmer

The skimmer is a device that continuously records what is on WMUL-FM's airwaves. It records to an uncompressed .wav file. The previous day's files are copied from the skimmer itself to the file server beginning at 12:05 A.M. Copying the files takes approximately ten (10) to fifteen (15) minutes. The mp3 versions are created beginning immediately after it finishes copying. The mp3ing process takes up to an additional fifteen (15) minutes.

The files of the skimmer are located in U:\Skimmer\On-Air and are available to all staff members to critique their own work. The entire U: drive is write-protected to prevent unauthorized deletions.

Each day has one or two folders containing the recordings from the skimmer for that day. Each file is fifteen (15) minutes long.

Each folder name is in the format "YYYY-MM-DD". The folders ending in "_mp3" contain 96 kbps mp3 recordings. The folders without that ending contain the original .wav files. The .wav files are kept for fourteen (14) days before being automatically deleted.

Reader's Notes

23.E. Generating Error Letters

Certain errors, such as forgetting to sign off of the log, are correctable. Other errors, such as forgetting to do meter readings, are not. For those errors that are not correctable, generate a typed letter that explains the error. The operator and someone from the Traffic Department must sign the letter.

Several common scenarios have typed form letters prepared, printed, and stored in the drawer of the Traffic desk. The original files are stored in T:\Traffic\Documents\Log Error Letters\

Currently, form letters have been generated for the following errors:

- Failure to perform a Daily EAS Receiver Check
- Failure to take meter readings.
- Total failure to complete any logging.

After noting the errors, prepare the appropriate letters. Store them with the checked logs. Once the operators have signed the letters, make copies as necessary. Store the originals with the first log to which they refer.

1. Make one copy for the "Discipline Letters" folder in the Traffic desk. This folder is sorted by operator. It permits the Traffic director to identify when an operator repeats the same mistake.
2. When a letter covers more than one day, make one copy for each day referenced in the letter. Use a red pen to underline the specific day to which each copy refers. "Wrong Day" letters and when an operator makes the same mistake on multiple days are examples of letters that cover more than one day.

23.F. Posting to the Log Error List

Reader's Notes

Update the log error list at least once a week. The update reflects those errors which have been corrected and the new errors that have been made. The log error list is posted throughout the station and includes only the names and dates of the errors.

1. Take the old list off the door of the Traffic office.
2. Any errors that have been corrected will be marked out on the old list. Delete those entries from the "Dates" column. It is easier just to leave the names for now. These same people may have made new errors since the previous list was posted.
3. Go through the "Log Error Notes" document and copy the names and dates into the "Log Error List".
4. Delete the names from step 2 where the person has not committed any new errors.
5. Print four (4) copies of the list. Post them in the following locations:
    a. Traffic Office Door
    b. Staff Room Door
    c. Studio Complex Door
    d. Bulletin Board in Studio A
6. Email all the people who have log errors. CC the Student Manager and the Training Coordinator.

Reader's Notes

23.G. Correcting Errors

1. An operator is supposed to come to the Traffic office and indicate that he/she is there to fix a log error.
2. Open the "Log Error Notes" document.
3. Locate his/her name in the "Log Error Notes" document.
4. For correctable errors, log into the web app and use the appropriate pages to revise the log entries.
5. If the error requires a letter, have them sign and date the letter.
6. On the "Log Error Notes" document, highlight the entry with the mouse and use the "Strikethrough" formatting.
7. If the operator has had a shift since the list was posted, check the logs for that shift to see if the operator made a new error.
8. Once all errors have been corrected, mark that person's name off the list on the Traffic office door. That list is the list of record. The other copies are for the operators' convenience.

HELPFUL TIP!

Some operators are not available during the office hours kept by a student Traffic Director. Others have no respect for the log error list and will not come in to fix their errors. You will have to go to them.

23.H. Filing Operator Logs

The old Operator Logs (Pre-July 2023) are stored in brown legal-size accordion folders in the filing cabinet next to the desk. They need to be retained for two years. After each month has passed, throw out the oldest logs. E.G. Once August 2023 turns into September 2023, then the August 2021 logs can be discarded.

23.I. Automatic Transmitter Logs

An automatic software program takes meter readings every 20 minutes. These readings are in addition to the meter readings taken by the operators. The program prints the previous day's readings to a PDF file at 8:00 A.M. each day. The program e-mails the PDF to the Operations Manager.