Tools for Radio

XStudio Voice Tracker

XStudio Voice Tracker

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Welcome to XStudio Voice Tracker

Part

I

XStudio Voice Tracker is an application for show preparation – creating voice segments for automated radio station programming. It can be used with the dcsTools.com XStudio audio delivery system or DCS™ and Maestro™ systems.

XStudio Voice Tracker can be run on a standard PC equipped with a standard sound card and is a standalone application which can be used either within the broadcast facility or at a remote location.

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Document Conventions

The following table describes important conventions used in the XStudio Voice Tracker documentation

Convention	_Description_
menu | menu command	Describes a menu item followed by a menu command.
[**button or mouse**]	Text between square brackets refers to a keystroke, i.e. [**F10**], button, i.e. [**Save**], or mouse click, i.e. [**Left-Click**].
⚠️	Signifies important information that may have an impact on operation of the software.
ℹ️	Signifies an informational note on using the software more efficiently or things that may affect operation of the software.
Hint	Signifies a hint that may be useful when using or setting up the software.
◻️	Where present, additional information is available by clicking on the graphic to display a hint window.

1.1   Introduction

XStudio Voice Tracker was created to meet changing automation show-preparation demands. Freeing up production studio time (the most common location for voice-tracking), being able to run on inexpensive hardware, ease of use, flexibility, and remote voice-tracking are some of the demands that dictated the design and implementation of XStudio Voice Tracker.

XStudio Voice Tracker is self-contained – there are no dependencies on the presence of an on-air delivery system (either XStudio or Maestro & DCS). The software is typically installed on a standard PC. For playback and recording, the PC's built-in sound card can be used or, for more flexibility, a multi-channel audio card can be used. Generally, any sound card that has standard Windows ACM drivers available for your operating system can be used. Selected higher-end audio cards from Audio Science and Digigram can also be used.

XStudio Voice Tracker simplifies the process of pre-recording all of your voice segments for future air shifts. Users can preview the log, audition audio elements on the log and test element segues to ensure tight voice-overs.

Voice tracks for an air shift can be created "cold" – with no rehearsal – or with full rehearsal of the audio sequence, starting with the last few seconds of the preceding song, the voice track, and the first few seconds of the succeeding song. Extensive use of function keys means initiating a recording sequence is a single button-push (or mouse click).

Voice track carts (audio files) can be stored in a location separate from the music, jingles, and commercials library, isolating the files for ease in locating and transferring files to a remote location.

The user interface is very customizable, making extensive use of tool bars and dockable controls that can be moved around and even become "floating". Settings are automatically saved on program exit and restored the next time XStudio Voice Tracker is used.

1.2   Key features

XStudio Voice Tracker incorporates a number of innovative features to make show-preparation tasks easier and more flexible:

- **Full rehearsed recording** – automatic playback of song outro and recording start with one-button start of next song.
- **Audition playback** – listen to song-to-voice-track segue and voice-track-to-next-song segue with a single keystroke with full audio overlap.
- **Manual voice-track recording** (cold tracking) is supported.
- **Re-do** a voice-track with a single keystroke or mouse click.
- Voice-track cart **Aux Mark settings can be adjusted manually**, then immediately rehearsed to hear to the result.
- The user interface is simple, easy to understand and fully customizable.
- The software can be used on a **standard PC** using a standard sound card, including laptop computers.
- **Complete standalone application** – no dependency on the broadcast audio system resources, which frees the user to create voice tracks outside the broadcast facility.
- **Multi-station, multi-site support**. Each station has its own source log folder, rehearsal audio folder (for music playback) and voice track output folder. A file transfer folder can also be designated and XStudio Voice Tracker will place copies of newly-created voice-track carts in the folder for further processing by another application.
- **Music database information** can be incorporated into the log display for complete song title and artist information.
- Audio files created with XStudio Voice Tracker are compatible with XStudio, DCS, and Maestro.
- Voice track audio files can be created with either the standard .DAF extension or with a .DFF extension for direct insertion into DCS & Maestro ACP systems.

1.3   What's New in XStudio Voice Tracker

This section documents changes and enhancements to XStudio Voice Tracker by version number and date. For information on less-recent changes and enhancements, see the [Revision History](#) topic.

Version 1.6.0.190 - 02/15/2023

1. **Important Change**. The minimum operating system requirement for XStudio Voice Tracker is now Windows 7. If you attempt to install XStudio Voice Tracker on an older operating system, the installation program will advise you the OS is not supported.

2. **Important Change**. XStudio Voice Tracker now requires the Microsoft Visual C++ 2015-2019 Redistributable software be installed. Previously, the redistributable software was the Microsoft Visual C++ 2008 Redistributable. During installation, this software will be installed automatically if not present or an older version is present on the system.

3. **Enhancement**. XStudio Voice Tracker now stores event logs as daily, dated logs instead of the original single event log. As a default, event logs are kept for 14 days.

4. **Enhancement**. Users can now modify the default event logging detail and control the number of daily event logs that are retained. See the topic on [Using the Event Log Configuration Dialog](#) for additional information.

5. **Enhancement**. Additional event logging has been added as a default to make it easier to see when a user is auto-tracking or manually recording voice tracks when troubleshooting.

6. **Enhancement**. XStudio Voice Tracker now detects latest Windows 11 versions and adjusts its display accordingly.

7. **Enhancement**. Beta support has been added for using Audio Science ASIO drivers. During installation of the audio engine service, you have the option to configure the audio engine to use ASIO drivers. Note this option applies only to users who have a supported Audio Science audio card installed on the host system and have installed the ASI ASIO drivers.

8. **Enhancement**. When viewing events within XStudio Voice Tracker, you can now change the [text display size](#) if desired.

9. **Fix**. When XStudio Voice Tracker was registered, restrictions on the maximum recording length were not lifted without the user exiting and restarting XStudio Voice Tracker. Now, this restriction is lifted immediately on successful registration.

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System Requirements & Installation

Part

II
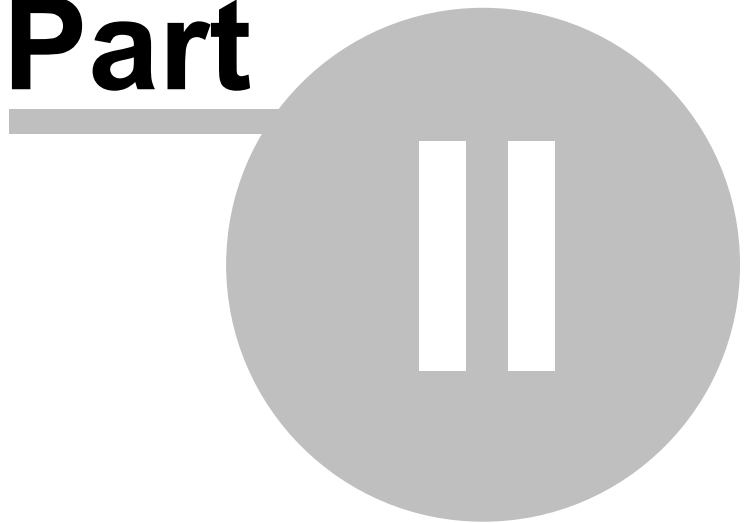
In order to use XStudio Voice Tracker successfully, certain hardware and Windows operating system requirements must be met. You must also install the XStudio Voice Tracker software on the PC, using an installation program.

This section documents the system requirements for XStudio Voice Tracker and covers the process of installing, updating and removing the XStudio Voice Tracker software.

2.1   System Requirements

Here are the base hardware and operating system requirements to run XStudio Voice Tracker:

Operating System	Windows 7 Pro or later.
CPU Speed	1 GHz or greater.
RAM Memory	4 GB RAM minimum. (8GB recommended)
Display	A minimum of 800 x 600 resolution, 1024 x 768 or greater is highly recommended.
Audio Card	An audio card supported by the operating system - one playback and one record channel as a minimum.
	⚠️ If only a single audio device is present in the system, that device will also be the one used by Windows to play system sounds. It is highly recommended that all system sounds be disabled if the PC has just one audio device. This will prevent unwanted sounds when auto-tracking a recording.
Hard Disk Space	At least 45 MB free disk space for XStudio Voice Tracker, audio engine, documentation and the Microsoft Visual C++ 2015-2019 Redistributable software. Additionally, you must have sufficient available disk space to accommodate voice-track carts (audio files) that are created and any source audio libraries that are stored locally.
A LAN card (NIC)	The OS' TCP/IP client must be installed on the PC. XStudio Voice Tracker uses networking to communicate with the host audio engine.

XStudio Voice Tracker requires the Microsoft Visual C++ 2015-2019 Redistributable Package (x86). If this package is not present on the host system, it will be installed automatically.

2.2   Installing, Updating or Removing XStudio Voice Tracker

The XStudio Voice Tracker installation program provides step-by-step instructions on every screen displayed during the installation. Follow the instructions on each screen to install XStudio Voice Tracker.

Before you install

1. Close all other programs, including any anti-virus programs.

2. Log on to your computer with administrator privileges.

> ⚠️   You must have administrator privileges to perform an installation or a software update when running on any of the supported Windows operating systems.

Installing XStudio Voice Tracker

XStudio Voice Tracker is distributed as a downloadable installation program. The latest version of the software is always available on our web site on the XStudio Voice Tracker product home page and the general downloads page.

1. After you have downloaded the installation program to your computer, locate the setup program, **xsVtkrSetup.exe**, in the folder to which you downloaded the file. [**Double-click**] on the setup program to begin installation.

2. Follow the instructions on each screen to install the software.

> ℹ️   The XStudio Voice Tracker installation package includes the audio engine service installer, which is run from within the main installer. When installation is complete, there will be two entries in the Add/Remove Programs (or equivalent) listing, one for the main application and one for the audio engine.

Updating XStudio Voice Tracker

1. If you have downloaded or otherwise received a revision for XStudio Voice Tracker, the process for updating the software is virtually identical to the initial installation. However, the installation dialogs may be a bit different. When updating, you are not typically given an opportunity to select the target folder for installation, as that choice has already been made in a previous installation.

2. You may be prompted that an old version of XStudio Voice Tracker has been found and that it must be uninstalled (removed) before continuing with the

update. If you see this prompt when updating XStudio Voice Tracker, you should answer "Yes" to remove the old version, and if prompted to confirm the removal of the old version, again answer "Yes".

3. On occasion, updating XStudio Voice Tracker may require some additional tasks be performed during the update. Such tasks might include validating and/or updating your registration and making adjustments to your preferences settings. If these tasks are needed, you will be prompted for any input required and notified if the update task could not be completed successfully.

> ⚠️ You must have administrator privileges to perform an installation or a software update when running on any of the supported Windows operating systems.

To Uninstall XStudio Voice Tracker

To remove XStudio Voice Tracker from your PC, select the Control Panel applet Add/Remove Programs (or equivalent). Select XStudio Voice Tracker and click on the [**Remove**] or [**Uninstall**] button. Follow the prompts to uninstall the software. If you wish to uninstall the audio engine service as well, select the ***dcsTools Audio Engine*** item and click on the [**Remove**] or [**Uninstall**] button. If the audio engine service is running, it will be stopped and the removed from the system.

> ℹ️ **The XStudio Voice Tracker installer uninstalls the main application only**. To remove the audio engine, you must uninstall it separately. It is listed as "***dcsTools Audio Engine***" in the installed software list.
>
> **Only files originally installed are removed**. Event log files and your preferences files are not removed. See the topic on application-created files for more information on files that are installed or created by XStudio Voice Tracker.

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XStudio Voice Tracker Configuration

Part III
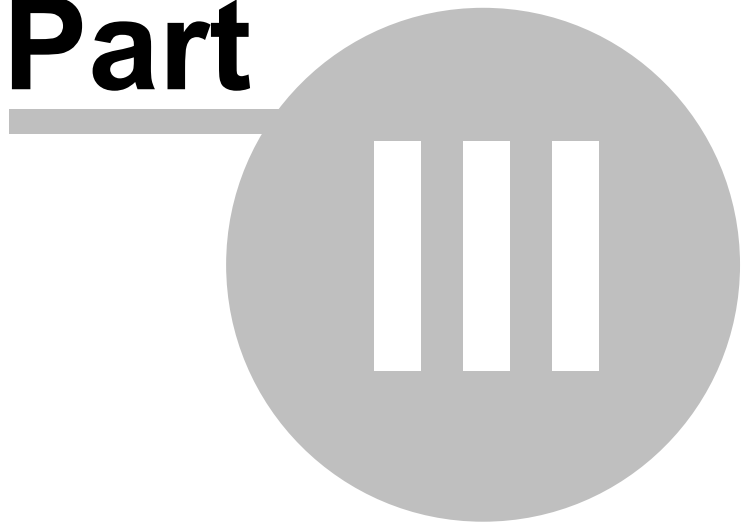
In order to use XStudio Voice Tracker, the software needs to know which of the audio channels available on your PC will be used for playback and recording, stations that will be voice-tracked, and specific information about each station. Optionally, cart categories can be defined to make the log display visually easier to work with and music library data can be imported and associated with a station. When music library data is associated with a station, the complete song title and artist is displayed on the log.

Preference settings are accessed using the main display menu item **Edit | Preferences**.

Setup Steps

To set up XStudio Voice Tracker for use, follow these steps:

1. **Required**. Select the playback and record audio channels that will be used for voice-tracking. (General tab)

2. **Required**. Define at least one radio station. (Stations tab).

3. **Optional**. Define cart categories for log colorization. (Cart Masks tab)

4. **Optional**. Import music database information for a station and link the imported music data to the station. (Music Data tab)

> **Hint** Music import source files are the same files as are created for Maestro systems.

5. **Optional**. Change default non-audio log item colors. (User Interface tab)

3.1   General Settings

The **General** tab of Preferences contains settings that are used **globally** within XStudio Voice Tracker.
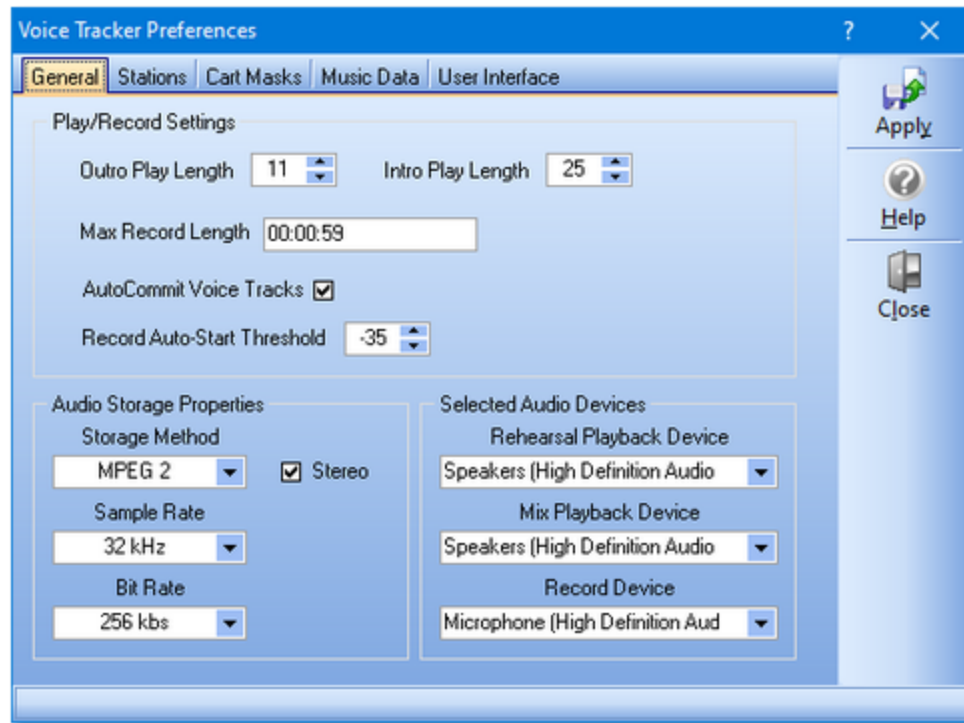
The page is divided into panels of related information, covering such items as length of playback for intro and outro content, the audio channels that will be used for playback and recording, and how voice track audio files (carts) will be stored.

Play/Record Settings

Outro Play Length. This is the value – in seconds – that will be used for playing the ending of an audio file. If the audio file has an Aux Mark, the number of seconds to play is measured back from the Aux Mark, otherwise, it is measured from the end of the file. The default value is 10 seconds. The allowed range is 5 – 59 seconds. In Auto-Track mode, this value is used to play back the last portion of the item on the log immediately preceding the voice-track cart that will be recorded.

Into Play Length. This is the value – in seconds – that will be used when playing the intro to a cart (audio file). The value is used when the Intro button or function key is used to start playing an item, and when auto-tracking a voice track. In Auto-Track mode, the audio item on the log will be played for this number of seconds when you set the Aux Mark of the voice-track cart during a recording sequence.

Max Record Length. The maximum length that will be allowed for voice track carts – entered as hours, minutes, and seconds. The default value is 59 seconds (00:00:59). The value must be greater than zero (00:00:00) and has a maximum of 23:59:59 (23 hours, 59 minutes, 59 seconds). If the maximum length entered here is reached during the recording of a voice-track, the recording is stopped automatically.

> In trial (demo) mode, the maximum recording length is **10 seconds**, regardless of the Max Record Length value.

AutoCommit Voice Tracks. The default behavior of XStudio Voice Tracker is to automatically commit (save the audio file & copy it to the file transfer folder, if enabled) a newly-recorded voice track. Uncheck this item to cause XStudio Voice Tracker to prompt you whether or not to commit the voice track cart when the recording is stopped. If you choose not to commit the voice track, the temporary audio file is removed from the system and no changes are made to any previous version of the voice track cart if one exists.

Record Auto-Start Threshold. The default behavior of XStudio Voice Tracker is start recording your voice track immediately, either when you press the [Record] button or when auto-tracking, when the preceding audio element's AuxMark is reached.The record auto-start threshold value is used when you enable voice track recording at first detected audio on the main display.This value is the threshold level at which recording will begin. you can set the threshold value in the range of **-1** to **-60**. Default value: **-35**.

Audio Storage Properties

This panel displays either two or three drop-down lists, depending on the type of audio storage method selected, along with a checkbox to select whether or not the voice-track recordings will be monaural or stereo.

Storage Method. Choose the base storage method for audio files that will be recorded using XStudio Voice Tracker. Available options are PCM (16-bit linear), MPEG 2, and apt-X. apt-X storage requires additional licensing of the apt-X encoding software, which is not a part of the standard XStudio Voice Tracker software package.

Stereo. The default recording method is stereo audio, but you can change it mono (monaural) audio by unchecking this item.

Sample Rate. Select the desired sample from the drop-down list. Sample rate options vary, based on the Storage Method selected. If in doubt, select the 32 KHz option.

Bit Rate. This option is visible and available only when the MPEG 2 Storage Method is selected. For stereo, 256 Kbps is the most widely-used.

Selected Audio Devices

In this section, you select the audio devices (channels) that will be used for playback and recording. Each selection is made from a drop-down list of available devices.

> **Hint** If the drop-down lists are empty, the usual cause is that the audio engine is not running. The XStudio Voice Tracker audio engine generates a list of devices at start-up. These lists are retrieved for display when setting your preferences. If the lists are empty and you make other changes to your settings and save them, **device selection settings are not changed**.

Rehearsal Playback Device. This the audio playback channel that is used for playing back music and other audio content from the log for rehearsal purposes. The channel is used for playback of song outro's, intro's and any other audio that might be auditioned. The default value is the 1st available audio playback device.

Mix Playback Device. This selection is for future use. If more than one playback channel is available, it will be used for playing selected audio to be "mixed" with the voice work. An example would be a music bed that is laid under the voice during recording. Because this channel is used as a part of the actual voice track recording, it needs to be a channel different than the rehearsal channel. The default is the 2nd available audio playback device.

Record Device. The audio recording channel that will be used for recording voice-track carts (audio files). It is the channel that your audio mixer output would be connected to. The default is the first available audio recording device.

3.2 Stations

The Stations tab in Preferences is where you define stations that will be voice-tracked. There is no set limit to the number of stations that can be defined. This topic provides summary information – for detailed instructions, refer to the step-by-step instructions topic.
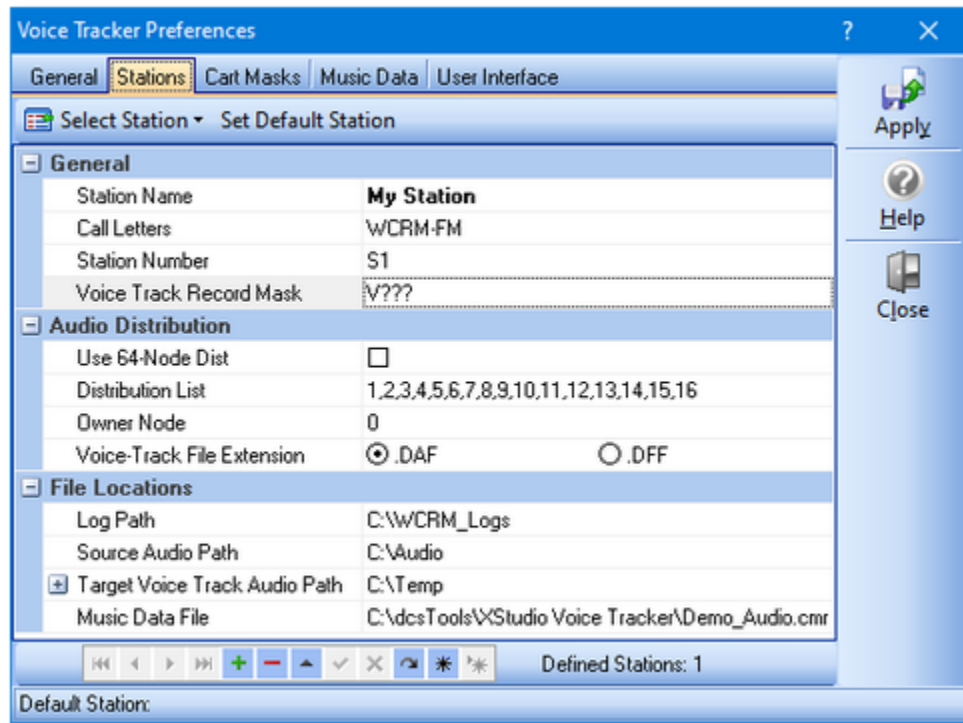
Each station that you define can have unique properties for the location of program log files, source and target audio files, distribution, voice track identification, and the music database for cross-referencing song titles and artists on the log.

For detailed instructions on filling out each field for a station, refer to the step-by-step instructions topic.

All fields, with the exceptions of the Voice Track Xfr Audio Path and Music Data File fields, are required. Here's an overview of each field and its usage:

General Section (Step-by-Step)

Station Name. The content of this field can be anything you wish – it is used for identification purposes within XStudio Voice Tracker only. The names you assign are displayed in the log selection dialog when choosing a station to voice-track. Choose a name that's meaningful to you in identifying the station to a maximum of 30 characters.

Call Letters. The official call letters of the station. This entry, along with the station name, is used where lists of stations are displayed – for instance, when choosing a station to voice-track. Maximum length is 7 characters.

Station Number. This is a 2-character entry used to locate program logs for the defined station. The entry must be 2 characters in length. Typical entries are "S1", S2", "SA", etc. If you are unsure what to enter, consult with the traffic manager for the station to obtain the correct entry.

Voice Track Record Mask. This is a list of one or more cart masks used to identify which cart numbers on a program log are voice track carts. XStudio Voice Tracker will allow the recording of carts that match this mask (or masks) only.

Hint	It is important that this group of carts is properly identified, as only items on the log whose cart numbers match these settings can be recorded or modified.

Typical mask values include "**V???**" (all carts that begin with a "V") and "**V###**" (all carts beginning with a "V" and containing a number in positions 2, 3, & 4). You may have as many masks as needed to correctly identify all items on a log that are voice track cart numbers. A pop-up panel is displayed for the creation and maintenance of the mask list. For more information on cart masks, see the Cart Masks Explained topic.

⚠️	Cart numbers matching the masks you define for voice-tracks are both recorded to and played from the Target Voice Track Audio Path location.

Audio Distribution Section (Step-by-Step)

Use 64-Node Distribution. Check this item if the broadcast facility for which voice-track carts will be prepared uses more than 16 audio work stations. The default is unchecked – 16 nodes.

Distribution List. A pop-up panel allows you to select the work stations that will receive voice-track carts created for this station. A least one work station (node) must be selected.

Hint	The pop-up panel list of station (node) names can be edited for more meaningful names. [**Double-Click**] on a work station in the list to edit the description.

Owner Node. This value is the **zero-based** number of the work station that is recognized as having created (i.e., the owner) the voice-track carts that are created for

this station. The default value is zero. This property is useful mainly for broadcast facilities using DCS and/or Maestro systems that employ a distributed audio system instead of the more common centralized audio storage system (ACP). For XStudio users, the value is not important.

Voice-Track File Extension. This property is use to set the file extension for completed voice-track carts (audio files). The default value is .DAF. The .DFF value is used for direct insertion of voice-track carts into a DCS or Maestro ACP (Audio Central Plus) system.

File Locations Section (Step-by-Step)

Log Path. This property is the drive and folder location where program log files for the defined station are located. When the dialog to select a log for voice-tracking is displayed, XStudio Voice Tracker looks in this location for log files matching the Station Number (defined in the General section) and marks the log calendar on the dates for which there are program logs. When the field is entered, a button appears – it can be used to pop up a folder selection dialog.

Source Audio Path. This property defines the drive and folder location of non-voice-track audio files that are used for rehearsal (playback) purposes. Content would typically consist of music, jingles and commercials for the station. If voice-tracking within a broadcast facility that utilizes a central audio server, the server's audio folder would be used. If XStudio Voice Tracker is being used off-site, the path would typically be on the local PC in a folder that contains copies of the music files supplied by the radio station – it could also be, for instance, an external USB drive.

> The XStudio Voice Tracker audio engine runs as a service application and as such, has no knowledge of any "mapped" drives – a drive letter assigned to a folder on a PC other than the one the audio engine is running on. Therefore, in order for the audio engine to be able to play or record files that are located on another PC, the paths to those folders must be entered using UNC notations. As an example, instead of using "**P:\Audio**" as the path, use the UNC notation: **\\Remote_PC_Name\Share_Name\Audio** in the path property field.

Target Voice Track Audio Path. This is the drive and folder location where completed voice-track carts (audio files) will be placed. This separate setting provides the flexibility to put voice-track carts in a location other than where source audio used for rehearsal purposes is located, which makes audio transfer management easier if voice-tracking at a remote location. This path may be the same as the source audio path if voice-tracking is being done with a station's broadcast facility.

Voice Track Xfr Audio Path. Use of this property is optional. If you enter or select a path for this property, a copy of each newly-created voice-track cart (audio file) is placed in the specified folder. This folder location might be used as a gathering point for voice-track carts that are to be transferred to another location using a daemon or application that transfers files and deletes them after transfer.

Music Data File. The use of an imported music data file is optional. If one is used for the defined station, its fully-qualified file name is entered in this field. A button adjacent to the field can be used to display a file selection dialog. If this field is filled in, XStudio Voice Tracker will attempt to open the specified music data file when opening a log for the defined station. The information in the music data file is used to display song title and artist information on the log. For information on importing music database information for use with XStudio Voice Tracker, see the section on Importing Music Data.

> **Hint** If no music data file has been created (imported) for the station you are defining, you can leave it blank initially. After saving (posting) the station information, you can select the station from a drop-down menu on the Music Data tab. Since no music data file was defined for the station, XStudio Voice Tracker will prompt you, asking if you want to import a database file for the station.

3.3 Cart Categories & Masks

The Cart Masks tab in Preferences is used to define audio categories and to create color schemes (background and text) that are used in the log display. You can have as many categories as you wish with multiple cart masks in each category.

> If you define duplicate cart masks for different categories, the cart number will be included in the first category the cart number matches. Categories are sorted alphabetically, by name.

The example screen shot depicts a few of the commonly-defined cart categories. The example cart categories shown are included in the XStudio Voice Tracker installation and can be imported to get started quickly with some basic categories.
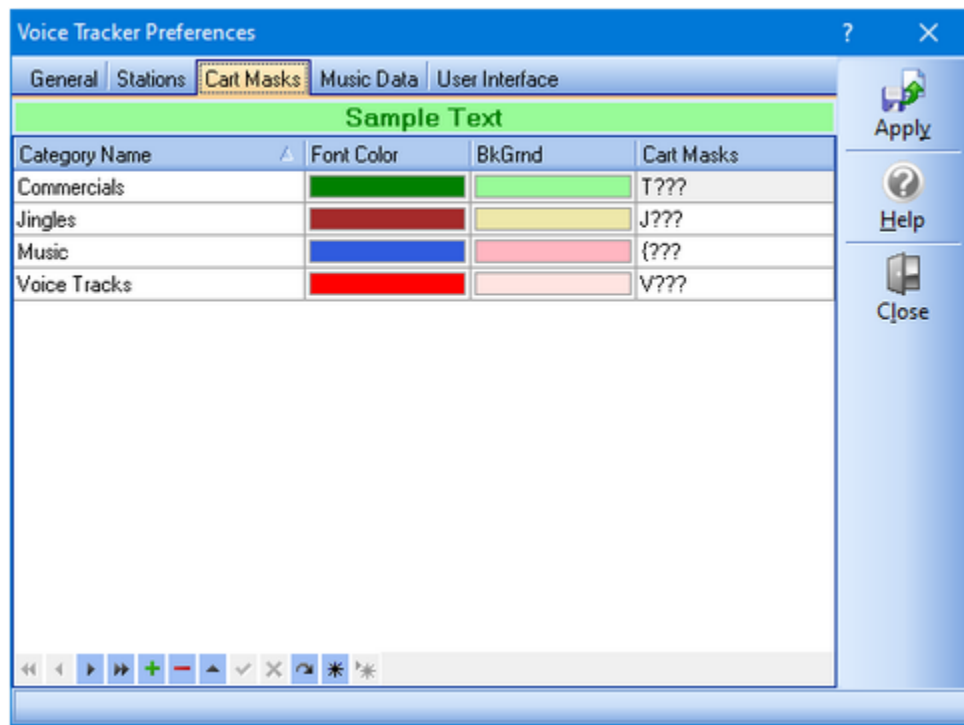
Creating a new Cart Category

To create a new Cart Category, click on the insert button in the data navigator, marked with a " **+** " symbol – you can also used the [**Insert**] key.

A dialog appears, prompting you to enter a category name. The name can be anything you wish and is usually text that identifies (to you) what the category contents are.
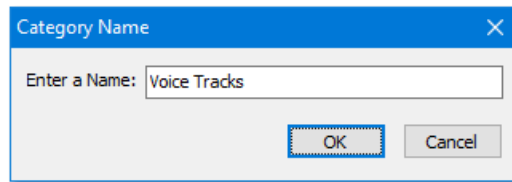
After entering the name, click on the [**OK**] button. A second dialog appears, prompting for an initial cart mask. Enter the mask, which must be four (4) characters in length. For additional information on cart mask creation, see the Cart Masks Explained topic.
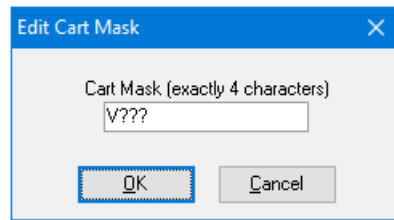
When you have entered the mask, click on the [**OK**] button. The newly-created category appears in the category list.

To set the category text and background colors, [**Double-Click**] on the color you wish to change. The field display changes to reveal a drop-down list button and a color dialog button.
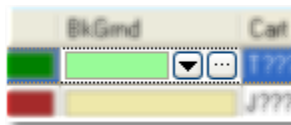
You can use the drop-down button to display commonly-used colors. Selecting a color causes an immediate change in the sample text display, located above the category list. The sample text display provides an idea of what the current color combinations will look like on the log.

If the color you'd like to use is not in the drop-down list, click on the color dialog button to display a standard custom color selection dialog. For more information on using the custom color selection dialog, see the Using the Color Customization Dialog topic.

To add additional cart masks to the category, or to edit the existing cart mask, [**Double-Click**] on the mask field. When editing the cart mask(s) for a category, a panel is displayed for managing the masks.
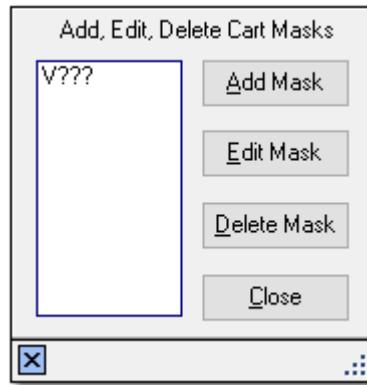
See the topic Using the Cart Mask Edit Panel for details on the panel's usage.

When you finish editing the text color, background color and/or the cart masks, click on the [**Post**] button in the data navigator to save your changes.

Editing a Cart Category

To edit any one of the properties of a category, [**Double-Click**] on the item you wish to edit – you can also use the [**F2**] keystroke after selecting the item you wish to edit. When you have finished making changes, click on the [**Post**] button to save them.

Deleting a Cart Category

To delete a cart category, first select the category to be deleted. Either click on the delete button in the data navigator (show above) or press the [**Delete**] key. You will be prompted to confirm the deletion.

Exporting Cart Category Information

Cart category information can be exported to an external file if desired. All categories are exported, including the name, colors and cart masks. [**Right-Click**] on the cart category data table to display a pop-up menu. Select the menu item **Export Cart Categories**. You will be prompted for a file name for the exported information.

Importing Cart Category Information

You can import cart category information previously exported from XStudio Voice Tracker. [**Right-Click**] on the cart category data table to display a pop-up menu. Select the menu item **Import Cart Categories** and follow the prompts.

> ⚠️ When importing cart category information, all categories currently displayed are replaced by the imported category information.

3.4 Music Data

The Music Data tab in Preferences is used for displaying, importing and managing music databases. It is optional to use music database information with XStudio Voice Tracker, but if used, song title and artist information is displayed on the log when voice-tracking a station that has a music data file assigned to it.

> To import your music database, you first need to export the music information from your music scheduling system. Supported music scheduling systems include Selector™, Music Master and POWERGOLD (others may be added in the future). If you are using Maestro and have already exported the music data for use within Maestro, you can use the same file. See the section on Exporting Data from your Music Scheduling System for more information on setting up and executing the export.
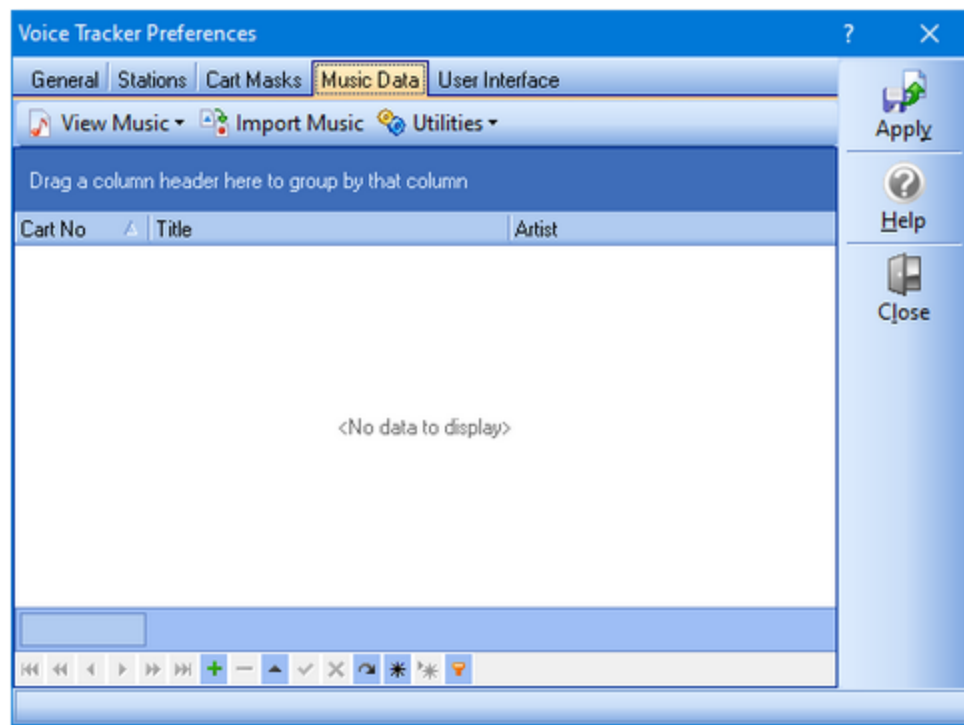
When the music data page is first accessed in Preferences, there is no music data displayed. Use the toolbar menu on this page to load and display music data, import a music database file, and to manage displayed data – add, edit, delete music records, along with bulk processing.
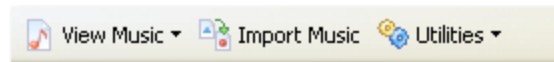
View Music (Open a Music Data File)

You can open existing music data files by clicking on the toolbar menu item [**View Music**]. A drop-down menu appears, listing all defined stations and a generic open file item.
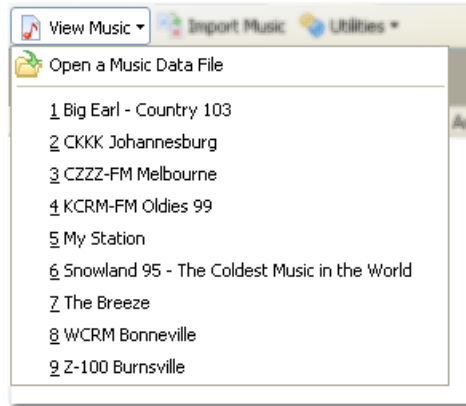
To view a particular station's music data file, select the station from the menu. If a music data file is assigned to the station, it will be loaded and displayed. If no music data file is assigned to the station, you'll be asked if you want to import a music database and assign it to the station you selected – the import process is described in the topic Importing Music Database Information.

The displayed music data can be sorted and grouped, if desired. To sort, click on any of the columns. To reverse the sort order, click on the column a second time. Grouping by Artist is supported – click and hold the mouse button down on the Artist column heading, then drag it onto the group box immediately above the displayed data and release the mouse button.

Import Music

To import a music database, click on the [**Import Music**] toolbar menu item. For details on the import process, see the topic Importing Music Database Information.

Add, Edit, Delete Music Records Manually

Edit a record. Any of the displayed music records can be edited. Click on the item you wish to edit, then click again or press the [**F2**] key to begin editing. When you have finished editing, click on the [**Post**] button in the data navigator.

Add a record. To add a new music record, press the [**Insert**] key or click on the Insert button in the data navigator. When you have filled in the cart number, title and artist information, click on the [**Post**] button in the data navigator. The Misc field is optional and is used during import to timestamp when the record was added or updated.

Delete a record. Select the music record you wish to delete and press the [**Delete**] key or click on the Delete button in the data navigator. You will be prompted to confirm the deletion.

Bulk Processing Utility Functions
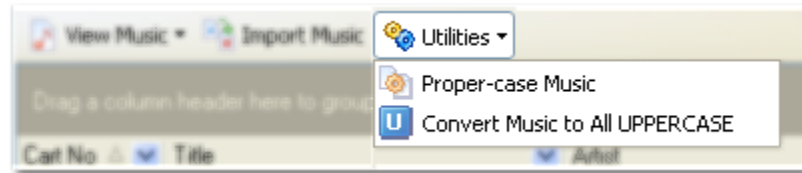
The menu toolbar's Utilities menu item provides some utility functions for manipulating the music data. Many music directors have a habit of entering song information in their music scheduling system as all uppercase text. Others may be inconsistent in the way data is entered. Use the utilities to format the song title and artist fields either as proper-cased or all uppercase text.

> **Hint** If you inadvertently bulk process displayed data, you can discard the changes – either select another music data file to load or exit Preferences. You will be prompted to save the music data changes – click on [**No**] if you wish to discard the changes.

3.5 User Interface

The User Interface tab in Preferences is used to change settings related to the user interface, including the non-audio log item colors.
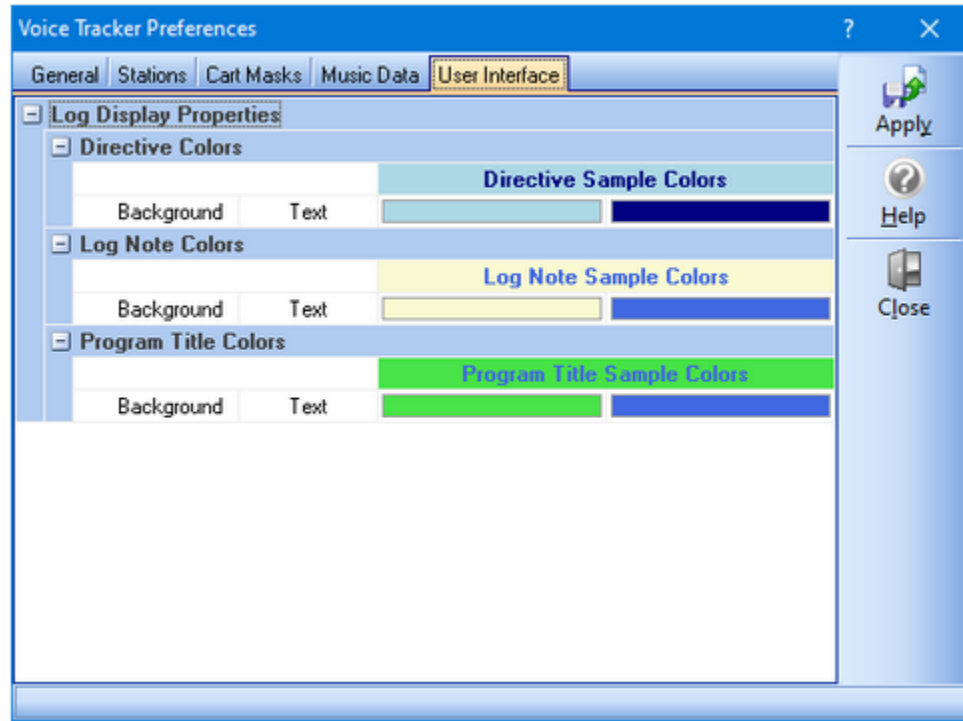
Log Display Colors

You should try to select colors that will stand out on the log display, yet be easily read. The default display colors are Navy Blue and Aqua for Directives, Navy Blue and Yellow for Log Notes, and Yellow and Teal for Program Titles.

As you change colors the appropriate sample text background and text colors will change to provide an idea of what the log line item will look like.

> ⚠️ If you are using an unusual set of color definitions for Windows, for instance, one of the supplied "themes", be careful not to inadvertently make the text "invisible". The sample displays should help avoid that problem.

Importing and Exporting Font and Color Information

You may have created the perfect color combinations for non-audio log items and want to preserve it for future use or to be able to restore the combination at some later date. XStudio Voice Tracker provides the means to save current settings and restore saved settings on-

demand. [**Right-Click**] anywhere on the color combinations page to pop-up the User
Interface context menu.
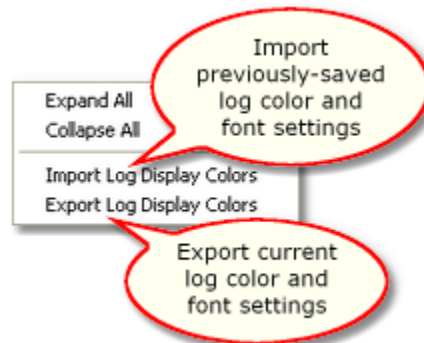
*User Interface Settings context
menu*

When importing or exporting these settings, you are prompted for a file name. As a default,
log settings files have the file extension **.LCF** (for **L**og **C**olors **F**ile).
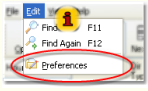
> **Hint**   Sample log color files are supplied with the XStudio Voice Tracker
> installation and placed in the application directory.

Using XStudio Voice Tracker

Part IV

Using XStudio Voice Tracker is fairly straightforward - launch the application, open a log, find the first voice track you wish to record and begin recording.

Before you can use XStudio Voice Tracker, you must define at least one station for which you will be recording voice tracks. To define a station, select the main menu item **Edit | Preferences**.

See the Stations topic for more information. You may also wish to review the *Quick Start Guide* supplied with XStudio Voice Tracker.

This section covers day-to-day usage of XStudio Voice Tracker - for more in-depth information on using specific dialogs and features, see the Reference section.

4.1 Basic Operation

Launch XStudio Voice Tracker

From your PC's Start menu, select **Programs | XStudio Voice Tracker**, then the **XStudio Voice Tracker** item. XStudio Voice Tracker will start up. The first time the program is started, a splash screen will appear, followed by a notice that the application is not registered, and finally the main display. The registration notice no longer appears once the software is registered.
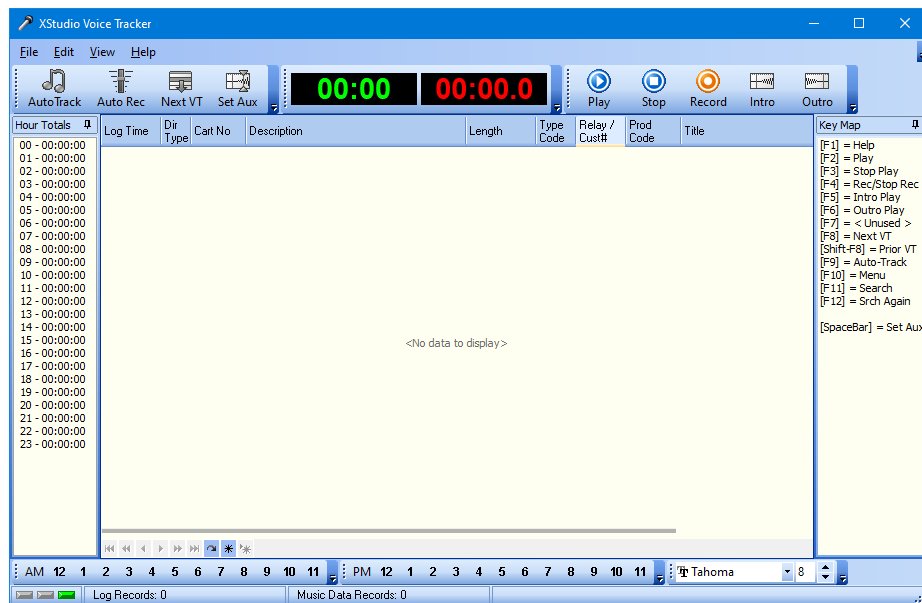
The screen shot above depicts the default layout of the main display. The display can be customized by moving toolbars and panels around to suit your needs. The log display can also be customized, including which columns to display, column width and location, and the font style and size. See the Customizing the Voice Tracker Display topic for more information.

Open a Log

Before any voice-track recording can occur, a log must be opened. Select the [**Open Log**] button, the menu item **File | Open Log** or use the [**Ctrl-O**] key combination display the log selection dialog.
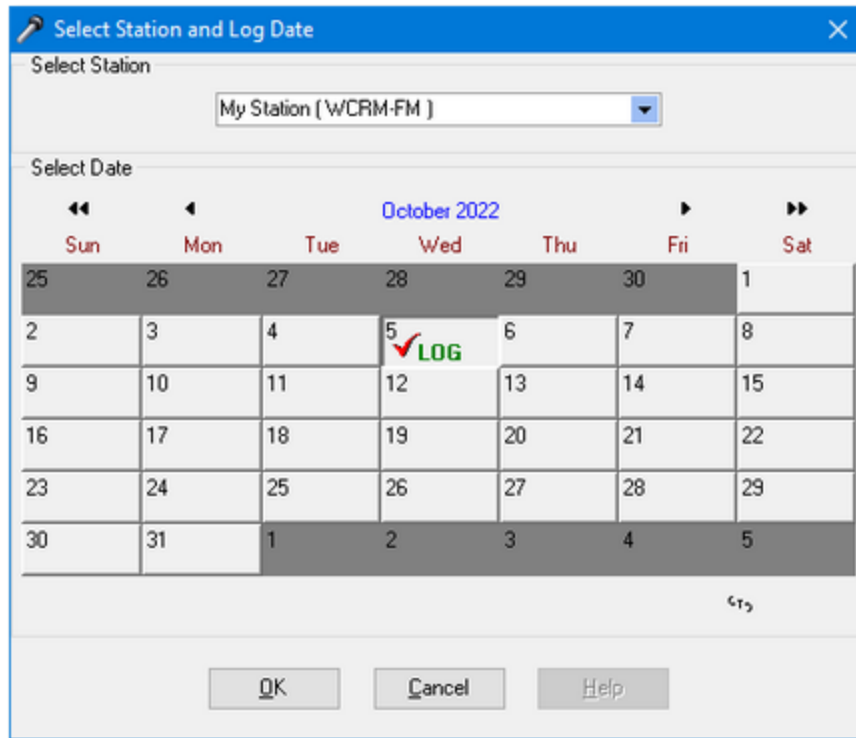
The log selection dialog contains a list of defined stations and a calendar that displays logs available for the selected station. Select the station you wish to voice-track for and the list of available logs is immediately updated. Use the navigation buttons to move ahead or back a month or year. When the log date you want to voice-track is visible, select the date (click on it) and click on the [**OK**] button.

The log is opened and the hourly totals panel is updated, similar to the example shown.
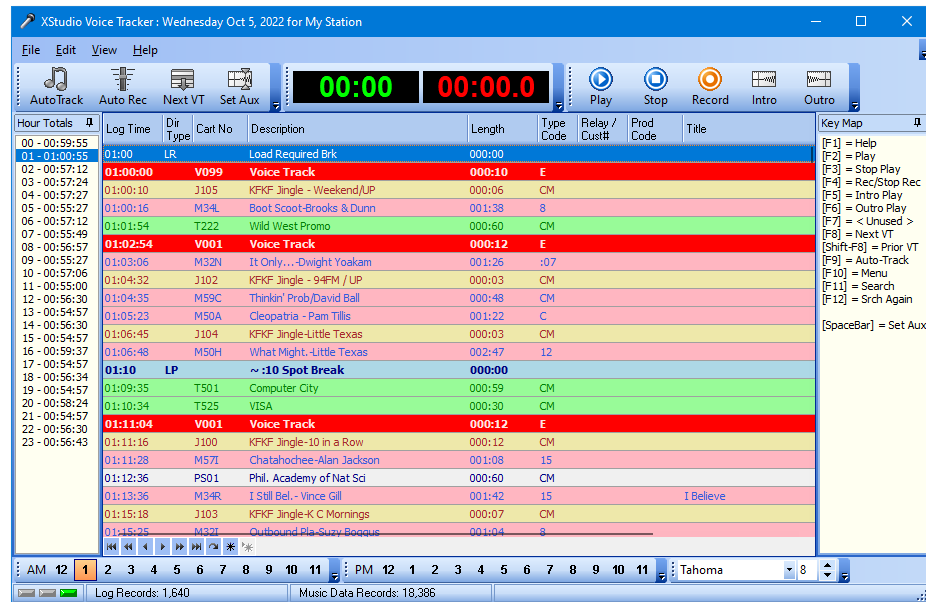
Select a Voice Track

Once the log is displayed, you can use a number of tools to navigate to the first voice track you want to record. For simplicity we'll use the two most common tools – the hour selection buttons and the [**Next VT**] button. See the Navigating the Log topic for more detailed information on other navigation tools and methods.

Click on the hour selection button for the hour that contains the first voice track you want to record.
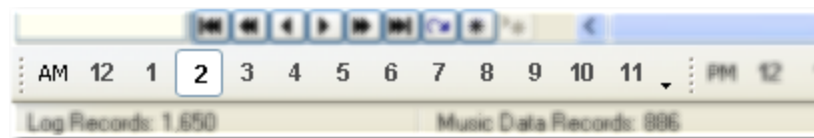
Click on the [**Next VT**] button or use the [**F8**] keyboard shortcut to locate and select the first voice-track log item in the hour.
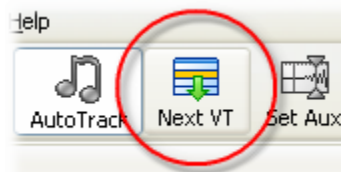
The selected voice-track cart on the log will appear similar to the example shown.
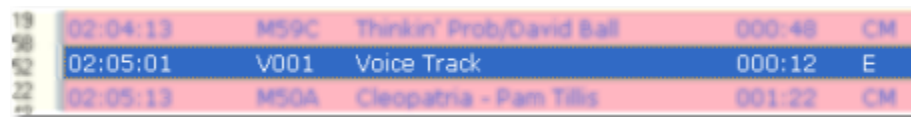
> **Hint**   To move to the voice-track cart *immediately prior to the current position* on the log, you can use the keyboard shortcut [**Shift-F8**].

Record the Voice Track

To begin recording, click on the [**Record**] button or use the [**F4**] shortcut key.
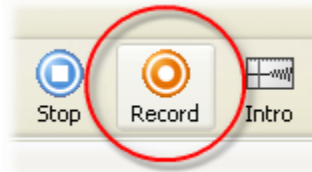
XStudio Voice Tracker supports either rehearsed voice-track recording (Auto-Track) or manual recording (cold record). If XStudio Voice Tracker is in Auto-Track mode, the last few seconds of the audio item preceding the voice-track cart is played and recording starts when the Aux Mark of the preceding item is encountered. If Auto-Track is not enabled, cold recording of the voice-track cart begins immediately with no rehearsal (Outro playback). Auto-Track mode is toggled on and off by clicking on the [**Auto Track**] button or using the [**F9**] shortcut key.

> **Auto-Tracking Step-by-Step**
> **Manual Recording (Cold Voice Tracks)**

Audio Playback

XStudio Voice Tracker provides a number of playback tools, including Intro and Outro playback of any valid audio item on the log.

When you have just completed a voice-track recording, the most common task is to audition the work you've just done. To audition, ensure the voice-track cart is selected on the log and click on the [**Play**] button or use the [**F2**] shortcut key. What happens next depends on whether or not Auto-Track mode is enabled:

Auto-Track Enabled: The last few seconds of the audio element immediately preceding the voice-track cart is played. At its Aux Mark, the voice-track cart starts playing with audio overlap, if any. When the voice-track cart's Aux Mark is encountered, the first few seconds (set in Preferences) of audio element immediately following the voice-track cart is played, again with audio overlap. The result of this sequence is you hear what the segue's are going to sound like on the air.

Auto-Track Disabled: The voice-track cart is played from start to finish. No other audio is played.

See the topic [Using the Audio Transport Controls](#) for more specific information on using the Intro and Outro playback functionality.

4.2   Navigating the Log

XStudio Voice Tracker includes a number of tools that can be used to navigate the log. The most commonly-used tools and methods are discussed in this topic.

Jump to Hour Buttons
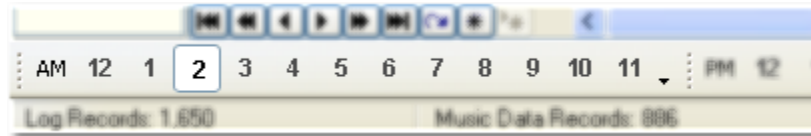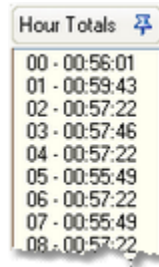
Two toolbars, one containing buttons for AM hour jumps and one containing buttons PM hour jumps, are displayed as a default. These toolbars can be moved around or even hidden, if desired. See the topic on [Working with Toolbars](#) for more detailed information on re-locating or hiding these toolbars.

Using these toolbars is simple – click on the AM or PM hour you want to move to. The first log element for the hour is displayed as top item in the log view.

Hour Totals List

One of the panels displayed on the main screen as default is the Hour Totals panel. It lists the hours of the log day along with the total estimated airplay time for each hour.

You can use this panel, similar to the Jump to Hour buttons, to move to a selected hour. Click on the hour you wish to jump to. The first element of the hour is displayed at the top of the log view and the Jump to Hour buttons are updated to reflect the hour chosen.

Next VT Button / Shortcut Key
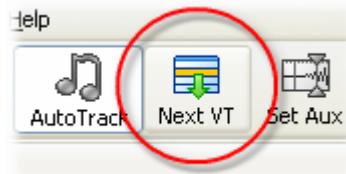
The [**Next VT**] (next voice track) button and its associate shortcut key, [**F8**], start from the current position on the log and move forward through the log until the next voice-track cart is found. When found, the item is selected and positioned at the center of the log display.

There's also a shortcut key to select the first voice-track cart prior to current position on the log – [**Shift-F8**].

See Keyboard Shortcuts for a complete list of shortcuts available in XStudio Voice Tracker.

Log Data Navigator

The log navigation tool (-details-) is located at the lower-left corner of the log display. It can be used to move around in the log display, but does not key on voice-track cart numbers.

Keyboard Navigation

When the log display has focus on the main screen, several keystrokes can be used to move about the log. The commonly-used keystrokes are:

[**PgUp**], [**PgDn**] – the page up and page down keys do exactly what they imply – move up or down one displayed page of the log at a time.

[**UpArrow**], [**DnArrow**] – the up arrow and down arrow keys move up one item and down one item respectively.

[**Ctrl-Home**], [**Ctrl-End**] – these keystrokes move the very beginning (first item) and very end (last item) of the log.

Mouse Navigation – 3-button or IntelliMouse

If you have a three-button mouse or a Microsoft IntelliMouse with the proper drivers installed, you can scroll the log using either the third mouse button (typically the middle one) or the scroll wheel.

The example shown results when using a 3-button mouse and pressing the 3rd button – the cursor changes to a direction navigator. Moving the mouse scrolls the log in the direction you move the mouse.

4.3   Auto-Tracking Voice Tracks

As it pertains to XStudio Voice Tracker, auto-tracking refers to the process of creating a voice-track cart (audio file) in rehearsed way. It's easy to tell if you have Auto-Track enabled – the [**Auto Track**] button on the main display indicates the status. If it's down, Auto-Track is enabled, if up, it's disabled.

--- Auto-Track Enabled ---

--- Auto-Track Disabled ---
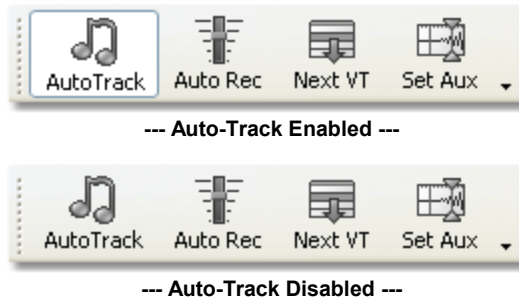
Auto-Track mode is toggled by clicking on the [**Auto Track**] button or using the [**F9**] shortcut key.

Start Auto-Track Sequence

To begin recording, make sure a voice track cart is selected on the log. Click on the [**Record**] button or use the [**F4**] shortcut key.
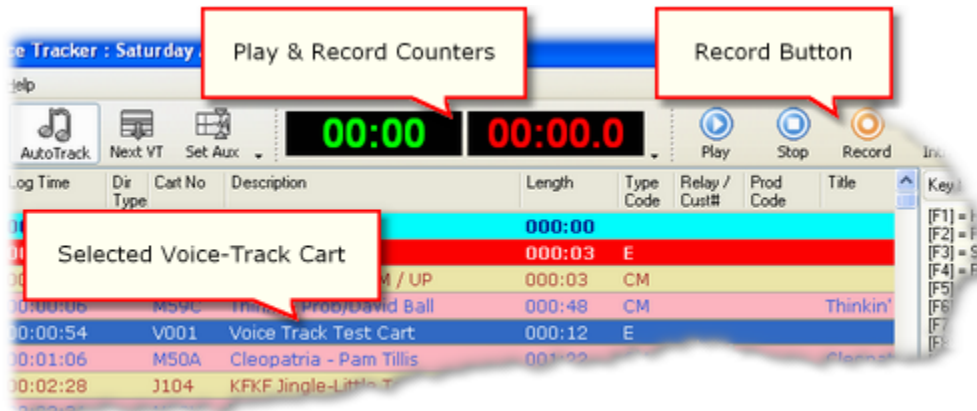
Outro Play

When Auto-Track mode is enabled, the voice-track recording sequence begins with playing last few seconds of the audio item preceding the voice track cart on the log.

Recording Auto-Start

When the Aux Mark of the playing audio is reached, the voice track cart recording starts automatically.
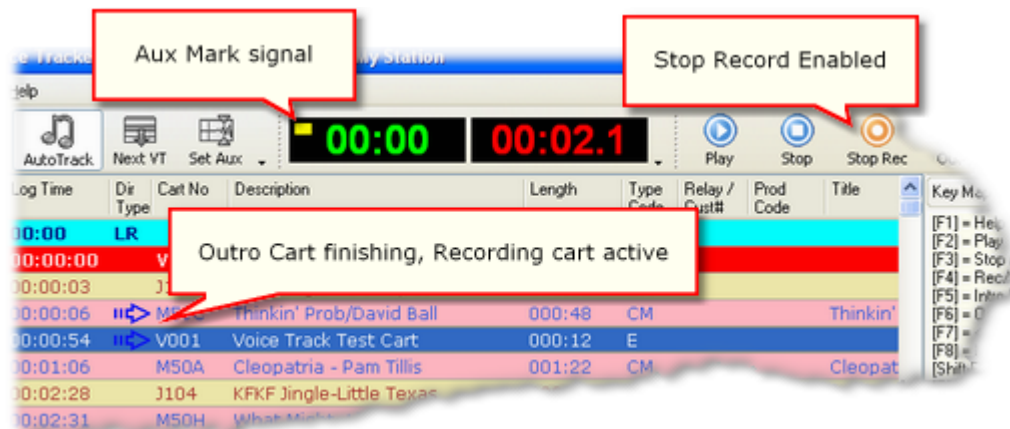
As soon as the Aux Mark indicator lights, recording is active and you can start talking. The recording time counter starts incrementing at record start and counts up in 1/10th second intervals.

> Recording starts immediately – there is no waiting for first audio. This allows for delaying your voice work to some point beyond the Aux Mark when the audio is played back. **Note**: You can override this behavior by enabling the [**Auto Rec**] button. When enabled XStudio Voice Tracker will wait for first detected audio before actually beginning the recording.

Set the Aux Mark

When you reach the point in your voice-track recording where you'd like the audio item immediately following the voice-track cart to start, click on the [**Set Aux**] button or use the [**Space Bar**] shortcut key. The next audio element on the log starts playing while the voice-track recording continues so you can talk up the ramp to vocal if needed.
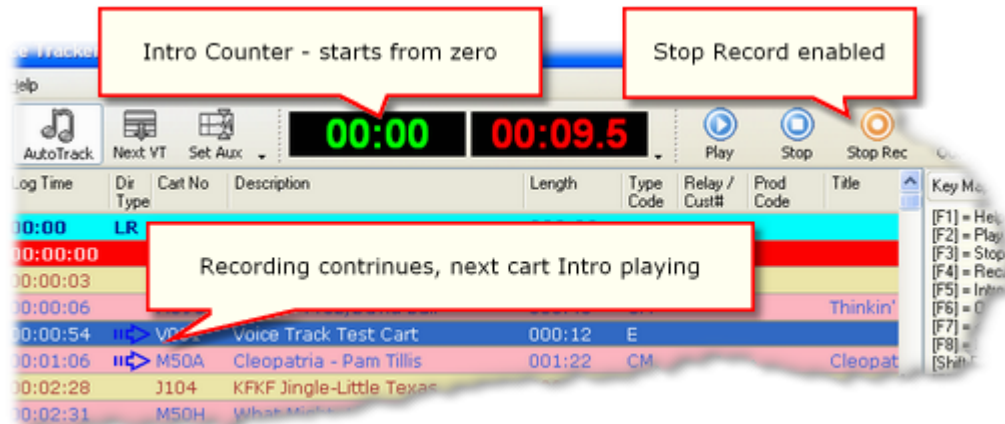
Continue recording until you have completed your voice-over.

Stop Recording

When you have completed your voice-over, click on the [**Stop Rec**] button or use the [**F4**] shortcut key.

> The [**Record**] button and [**F4**] shortcut key are toggled to stop recording, rather than start, when there is an active voice-track recording.

Auditioning the Voice-Track

To listen to the voice-track sequence as it will appear on the air, ensure the voice-track cart is selected. Click on the [**Play**] button or use the [**F2**] shortcut key. With Auto-Track enabled, XStudio Voice Tracker will play the last few seconds of the audio item preceding the voice-track cart, segue into the voice-track cart playback, and segue into the item following the voice-track cart, providing a quick means of auditioning your sequence.

Do-Overs

If you are not happy with the voice-over, it's easy to re-do it – just click on the [**Record**] button to start the Auto-Track sequence all over again. The original voice-track cart is overwritten with the new recording.

Tweaking the Voice-Track Aux Mark

You can revise a voice-track cart Aux Mark setting manually. [**Double-Click**] on the voice-track cart on the log, which opens a cart edit dialog. In the dialog, you can revise the Aux Mark, as well as a number of other properties, including start and end date.

> The Start Date for a voice-track cart is automatically set to the ***log date*** and the End Date of the cart is automatically set to the ***log date plus one day***. The End Date setting ensures that if a voice track scheduled on the log date needs to play after midnight of the following day due to over-scheduling of the log, it will play rather than being skipped due to date conflicts.

Edit the Aux Mark and click on the [**Commit**] button to save the changes. You are returned to the main display and can immediately check the results of your edit by clicking on the [**Play**] button or by using the [**F2**] shortcut key.

For more detailed information on editing the Aux Mark and other voice-track cart properties, see the topic Editing Cart Properties.

4.4   Manually Recording Voice Tracks

If the XStudio Voice Tracker Auto-Track feature is disabled, voice-track recordings are initiated cold with no rehearsal playback of the preceding audio. This method of recording voice-track carts is often referred to as "cold tracking". Manual recording without rehearsal might be desirable if;

a) a source music library is not available for rehearsal playback, or

b) the voice talent feels knowledgeable of the music content and doesn't need rehearsal of the outro and intro content to create the voice-over cart.

Disable Auto-Track Mode

To manually record voice-track carts, ensure that the [**Auto Track**] button is "up", as shown in the first screen shot. Auto-Track mode is toggled by clicking on the [**Auto Track**] button or using the [**F9**] shortcut key.

--- Auto-Track Disabled ---

--- Auto-Track Enabled ---
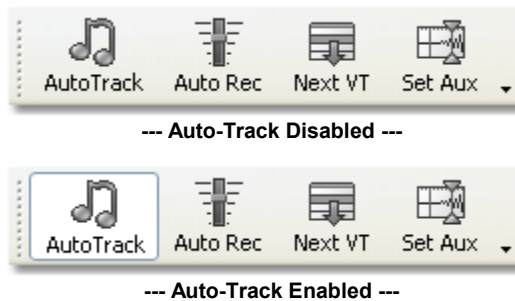
Select a Voice-Track Cart

Select a voice-track cart for recording by clicking on the log item once – or you can use the [**Next VT**] button or [**F8**] shortcut key to locate the next voice track on the log, starting from the current position. For additional information on navigating the log and selecting voice-track carts, see the topic Navigating the Log.

Start Recording

To begin recording, make sure a voice track cart is selected on the log. Click on the [**Record**] button or use the [**F4**] shortcut key. Recording begins immediately. The recording time counter starts counting up in 1/10th second intervals.

> Recording starts immediately – there is no waiting for first audio. This allows for delaying your voice work to some point beyond the Aux Mark when the audio is played back. **Note**: You can override this behavior by

enabling the [**Auto Rec**] button. When enabled XStudio Voice Tracker will wait for first detected audio before actually beginning the recording.

Set the Aux Mark

When you reach the point in your voice-track recording where you'd like the audio item immediately following the voice-track cart to start, click on the [**Set Aux**] button or use the [**Space Bar**] shortcut key. This action has no effect other than marking the spot in the voice-track recording where the next audio element will begin playing when the log is performed on-air.

Stop Recording

When you have completed your voice-over, click on the [**Stop Rec**] button or use the [**F4**] shortcut key.

> The [**Record**] button and [**F4**] shortcut key are toggled to stop recording, rather than start, when there is an active voice-track recording.

Auditioning the Voice-Track (Playback)

To play back (audition) the newly-completed voice-track recording, click on the [**Play**] button or use the [**F2**] shortcut key. The voice-track cart begins playing immediately. Stop the playback at any time by clicking on the [**Stop**] button or by using the [**F3**] shortcut key.

Do-Overs

If you are not happy with the voice-over, it's easy to re-do it – just click on the [**Record**] button to start the recording all over again. The original voice-track cart is overwritten with the new recording.

Tweaking the Voice-Track Aux Mark

You can revise a voice-track cart Aux Mark setting manually – [**Double-Click**] on the voice-track cart on the log, which opens a cart edit dialog. In the dialog, you can revise the Aux Mark, as well as a number of other properties, including start and end date.

The Start Date for a voice-track cart is automatically set to the ***log date*** and the End Date of the cart is automatically set to the ***log date plus one day***. The End Date setting ensures that if a voice track scheduled on the log date needs to play after midnight of the following day due to over-scheduling of the log, it will play rather than being skipped due to date conflicts.

Edit the Aux Mark and click on the [**Commit**] button to save the changes. You are returned to the main display and can immediately check the results of your edit by clicking on the [**Play**] button or by using the [**F2**] shortcut key.

For more detailed information on editing the Aux Mark and other voice-track cart properties, see the topic Editing Cart Properties.

4.5 Editing Voice-Track Cart Properties

Voice-track cart (audio file) properties can be edited manually, if desired. Most commonly, the reason for editing would be to "tweak" (revise) the cart's Aux Mark setting, although other properties can be edited as well.

> ⚠️ Editing of cart properties is allowed only for voice-track carts – those cart numbers that match the voice-track cart mask for the station you are voice-tracking. Editing of other cart properties is not allowed.

To manually edit a voice-track cart's properties, [**Double-Click**] on the item on the log. The edit dialog is displayed, similar to the example shown.

You can edit the cart description, agency field, log length, start date, end date, AUX Mark, audio length (shorten only), distribution and gain trim.

Editing the Aux Mark

Editing the Aux Mark property changes the "trip point" of the voice-track – the point at which the element immediately following it on the log starts. Depending on where in the voice-

track the Aux Mark is set, there may be very little or quite a bit of audio overlap when the segue from the voice-track cart to the next element occurs.

The Aux Mark value is displayed in hours, minutes, seconds and milliseconds. Typically, you will edit the values for the seconds and milliseconds as part of the fine-tuning of the Aux Mark setting.

The recommended approach for editing is to place the cursor at the end of the displayed value, then backspace to the first value to be edited, which erases the end number. Type in the revised value – you must fill out the value completely or an error dialog will appear. As an example, if the current Aux Mark value is 00:00:08.784 and you want make the value 7.5 seconds, follow these steps:

1. Position the edit cursor at the end of the Aux Mark field.

Log Length	00:12
Aux Mark	00:00:08.784
Length	00:00:20.776

2. Use the [**BackSpace**] key to delete the unwanted digits.

Log Length	00:12
Aux Mark	00:00:0
Length	00:00:20.776

3. Enter the new value, making sure to enter the value completely, including milliseconds.

Log Length	00:12
Aux Mark	00:00:07.500
Length	00:00:20.776

> While the Aux Mark and Audio Length fields display values to the millisecond, DCS, Maestro & XStudio presently resolve these values to 1/100th second (centiseconds) only. The edited property value is stored by rounding the milliseconds value to centiseconds.

When you have finished editing the cart properties, click on the [**Commit**] button to save the changes. If you want to discard your changes, click on the [**Close**] button without committing the changes.

You can immediately audition the effect of your Aux Mark change by ensuring the cart you just edited is selected on the log and either clicking on the [**Play**] button or using the [**F2**]

shortcut key. Enable Auto-Track mode to audition the segue from the voice-track cart to the next audio element on the log.

Editing Other Voice-Track Cart Properties

Normally, the only cart property you'd need to edit is the Aux Mark, but you can edit other properties, if needed, in the Edit Cart dialog. It is recommended, though, that you consider carefully the effects of editing other properties, particularly the Cart Distribution, which could cause the voice-track cart not to be available in the studio where it's needed.

Most of the properties are self-explanatory – and there is context-sensitive help for each field. Select the field you want more information on and press [**F1**] for pop-up help. You can also use the [**?**] button at the top of the dialog – click on it, then click on the item you want help with.

Reference

Part V

This section contains more detailed background information on a number of key subjects that will help you to gain a better understanding of how XStudio Voice Tracker works.

Studying these sections is not absolutely essential but it will make it much easier for you to use XStudio Voice Tracker more efficiently and effectively.

5.1   Customizing the Display

The XStudio Voice Tracker main display can be customized in a number of ways to suit your needs, including the general appearance, layout of tool bars, location of information panels, log item colors, and log display column order, size and visibility.

General Appearance

You can modify the general appearance of XStudio Voice Tracker by selecting the menu item **View | Appearance** from the main menu, shown here.
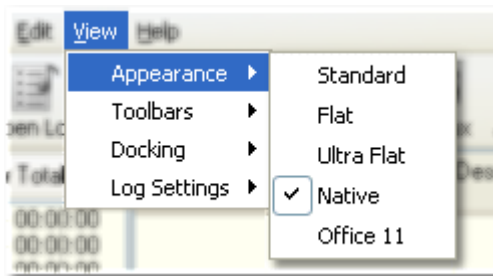
Select one of the styles to see the effect on the display. Here are some samples of the styles:

---- **Native** ----

---- **Office 11** ----

---- **Ultra Flat** ----

---- **Flat** ----

XStudio Voice Tracker saves your selected style on exit and restores it the next time the application is run.

Working with Toolbars

XStudio Voice Tracker makes extensive use of toolbars on the main display. Any toolbar can be moved around by dragging it from its present position to any of the display edges. Where there's an area the toolbar can be placed, it's immediately put in position. Toolbars can also "float", as shown in this example:

Floating Toolbar

XStudio Voice Tracker automatically saves toolbar locations on exit and restores them the next time the application is run.

If you should "lose" a toolbar – meaning it's no longer visible – or if you want to "get things back the way they were", you can use the menu item **View | Toolbars** from the main menu.
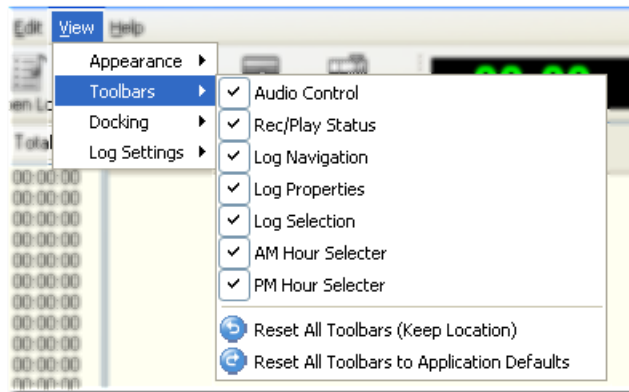
Toolbar visibility toggles

All toolbars that are checked in the sample menu are visible – unchecked items are not. To make a tool bar visible, select the toolbar item on the menu. You can also reset the toolbar layout to the application defaults using the provided menu items.

XStudio Voice Tracker saves your toolbar layout on exit and restores it the next time the application is run.

Working the Docked Panels

The XStudio Voice Tracker main display utilizes panels that can be moved around – or docked – on the display. Additionally, the panels can be "floated" on the display, as shown here.
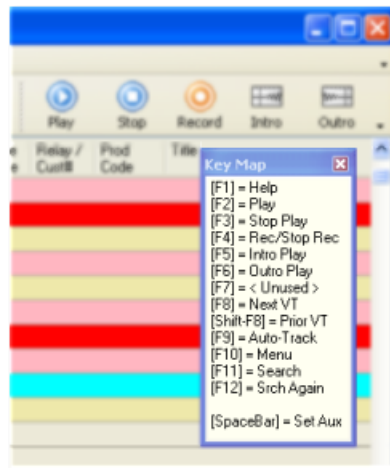
Key Map "undocked" (floating)

Docked panels can also "auto-hide" – meaning that when the mouse moves away from the panel, the panel "hides", leaving just a tab displayed to save display face. This feature is useful when information contained in a panel is used only occasionally and does not have to be constantly visible. The auto-hide feature can be turned on or off by clicking on the [**Auto-Hide**] button on the panel, as shown.
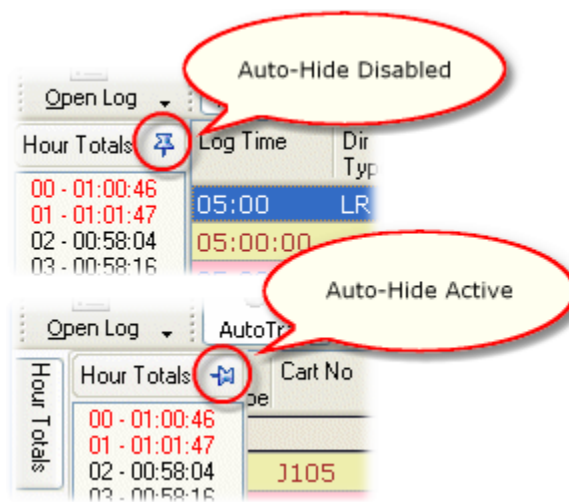
Docking Auto-Hide

When a panel is hidden, float the mouse pointer over the tab label for the panel and the panel will open – move the mouse pointer off the panel and it will close.

Panels can also be combined – placed together – on the display. Drag a panel over another panel. An outline appears, indicating how the two panels will be combined. Possible combinations are side-by-side, top and bottom, and tabbed, which places the two panels together and displays a tab for each for selection.

If you have re-arranged the dock panels and want to restore them to the application defaults, select the menu item **View | Docking | Restore Dock Settings to Application Defaults**, as shown.
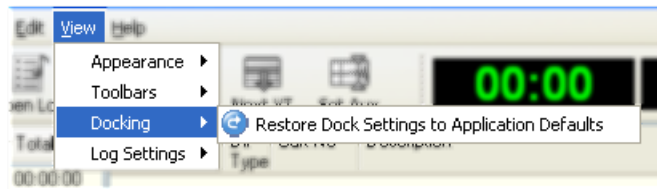
XStudio Voice Tracker saves your dock panel arrangement on exit and restores it the next time the application is run.

> Some docking panels have unique features or specialized usage. See the topics Intro Countdown Timer and Station Info Panel for details.

Customizing the Log Display

The log display can be customized in a number of ways. Item colors are controlled by the cart categories you defined in Preferences - Cart Masks. Column widths, column order, text font and font size, which columns are visible, and how spot times are displayed are all controlled from the main display.

Column Width. To modify a column's width, float the mouse over the end of the column's heading. A sizing icon will appear. [**Left-Click**] and hold the mouse down. Move the mouse left or right to decrease or increase the column's size. Release the mouse button when finished sizing the column.

Adjusting log column width

Column Location. To move a column, [**Left-Click**] and hold the mouse down on the column's title. Drag the column left or right to move it to a new position. The proposed new position is marked by an arrow. Release the mouse button to complete the column move.
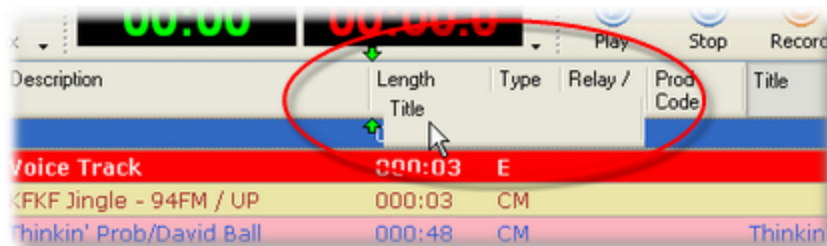
Moving a log column

Column Visibility. Columns of information can be hidden or displayed, according to your preference. To add or remove columns from the log display, select the menu item **View | Log Settings | Customize Columns**. A dialog is displayed, containing the columns that are not currently displayed.
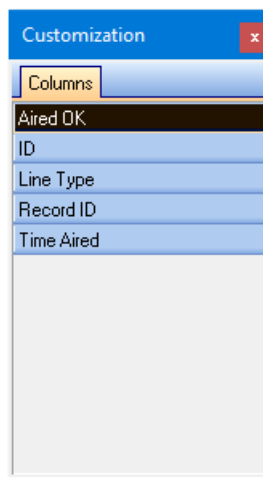
To add a column to the log display, drag the item you want displayed from the customization dialog to the position on the log's title row where you want the column displayed. An arrow marks the position. Drop the column to complete adding it to the display.

To remove a column from the log display, drag the unwanted column from the title row of the log to the customization dialog and drop it.

Font and Font Size. You can change both the font type and font size for items displayed on the log. Only items on the log itself are affected, all other panels, menus, etc, are unchanged. To change the font type, locate the Log Properties toolbar – if it's not visible, you can make it reappear using the **View | Toolbars** menu item (-more-). Click on the arrow adjacent to the font name to display a list of available font styles.
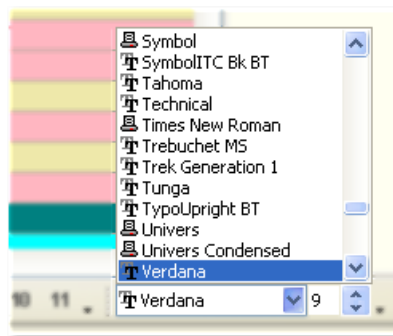
Font selection

Select the new font – the displayed log will updated with the new font style immediately.

To change the font size, use the spin edit control on the Log Properties toolbar. The control allows entry of only an acceptable range of font sizes.

> **Hint**   To make the font size change, you must press the [**Enter**] key once the size you want is displayed in the control.

Spot Time Display. The way audio items' time is displayed on the log is controlled from the menu item **View | Log Settings | Spot Times**.
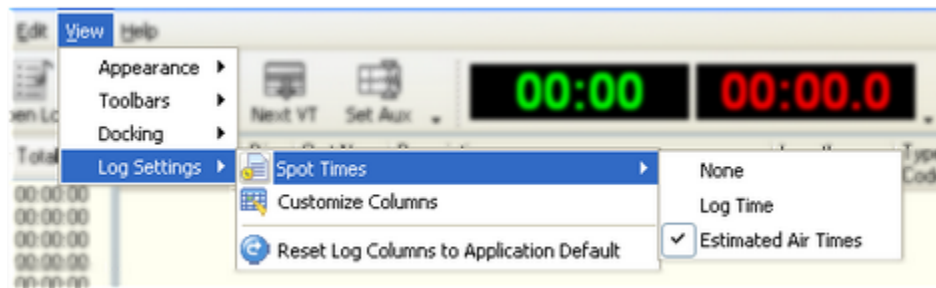
Selecting spot time display type

Selecting the **None** option suppresses the time display for all audio items on the log. Selecting the **Log Time** option displays the audio item times as are in the source log. Selecting the **Estimated Air Times** option (the default) displays audio items on the log at the time within the hour they are _estimated_ to be played.

> Estimated Air Times are calculated from the beginning of each hour. Audio items in some hours may have estimated play times that extend into the next hour – this is the result of over-scheduling an hour, a common practice for locally-automated stations. Estimated Air Times are calculated from the log length field.

5.2   Data Navigators

Several areas in XStudio Voice Tracker make use of so-called "data navigators". Essentially, a data navigator is an organized set of buttons that provides an easy-to-use interface for navigating around in displayed data like the log, station definitions, cart masks, and music databases. In addition to navigation, some of the navigators include buttons to add (insert), edit, & delete items.

Two example navigators are shown here – there are two because the "state" (availability) of buttons will vary depending on the current task. For instance, if you are at the beginning of a log, the navigator buttons for moving backwards through the log are disabled – at least, until you move away from the beginning of the log.
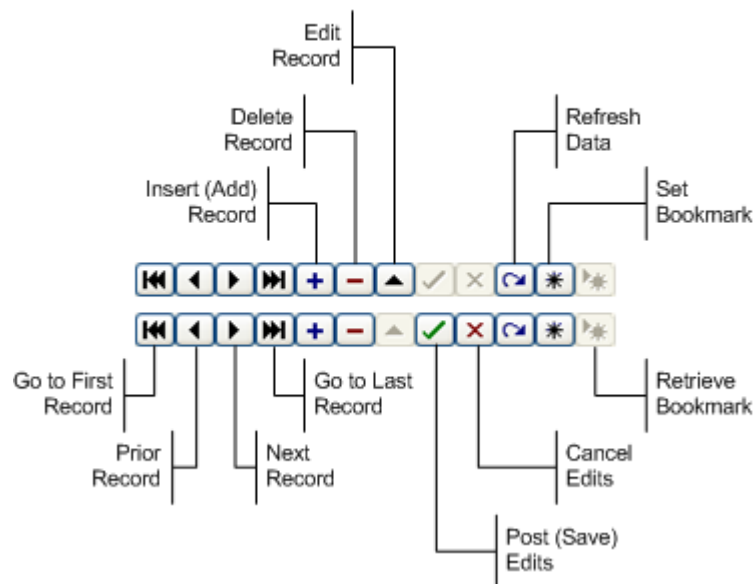
Depending the area of XStudio Voice Tracker you're working in, some of the navigator buttons depicted are not visible because the functionality they provide is not allowed.

5.3   Keyboard Shortcuts

There are a number of keyboard shortcuts implemented in XStudio Voice Tracker. These tables document available shortcuts and their meaning.

Main Display

These shortcut keys are available anywhere on the main display – they are "global" shortcuts.

Shortcut	Meaning
[**F1**]	Help – launches the help file.
[**F2**]	Start Play. If a log is loaded and an audio item selected, it will be played from the beginning. If Auto-Track is enabled and the audio item is a voice-track cart, the outro of the preceding cart will be played and segued to the voice-track cart.
[**F3**]	Stop Play. If an item is playing, it will be stopped. If more than one item is playing, the item that was started first is stopped.
[**F4**]	Record / Stop Record. If a voice track is selected, the recording sequence will start. If Auto-Track is enabled, the sequence begins by playing the preceding item's outro, then starting the recording at the item's Aux Mark. If Auto-Track is not enabled, recording begins immediately. If a recording is active, pressing the key stops the recording.
[**F5**]	Intro Play. If an audio item is selected on a log, the intro of the audio is played. Length of playback is controlled by the Intro Play Length in Preferences.
[**F6**]	Outro Play. If an audio item is selected on a log, the outro of the audio is played. Length of playback is controlled by the Outro Play Length in Preferences. **Note**: Outro play length is calculated from the Aux Mark setting of the audio file.
[**F7**]	< not used >
[**F8**]	Next Voice Track. If a log is loaded, an attempt is made to find the next voice track cart on the log, starting from the currently

Shortcut	**Meaning**
	selected item. If no item is selected, the search starts from the beginning of the log.
[**Shift – F8**]	Previous Voice Track. If a log is loaded, an attempt is made to find a voice track prior to the currently selected item on the log. If no item is selected, the search starts from the end of the log.
[**F9**]	Auto-Track toggle. Pressing the key toggles Auto-Track on and off.
[**F10**]	Menu key – activates the application's main menu.
[**F11**]	Search. Activates a dialog for searching the log.
[**F12**]	Search Again. Repeats an active search, starting from the current position, either forward or backward, depending on the search settings.
[**Spacebar**]	Set Aux Mark. This keystroke is "armed" only when there is an active recording. Pressing the key while recording sets the cart's Aux Mark and, if Auto-Track is enabled, starts playback of the item following the voice track on the log.

5.4   Music Database Management

It is optional to use music database information with XStudio Voice Tracker, but if used, song title and artist information is displayed on the log when voice-tracking a station that has a music data file assigned to it.

This section covers basic music database management tasks, including importing music data into XStudio Voice Tracker and exporting title and artist data from your music scheduling system.

5.4.1   Exporting Data from your Music Scheduling System

In order to be able to import music information with XStudio Voice Tracker, you must export the information from your music scheduling system to a format that XStudio Voice Tracker can understand.

> **Hint**   If you have used Maestro at one time or another and have exported music for use by that system, the instructions and resulting output file for the popular music scheduling systems are nearly identical. Music exports created for Maestro can be imported without modification. You may wish to consider using the dcsTools Generic Export, though, as it contains the additional fields Album and Year.

In the cases of Selector, MusicMaster, and the Generic dcsTools Export, the exported data will be a specially formatted text file. For POWERGOLD, the exported data is in binary format.

5.4.1.1 Exporting MusicMaster

The Windows version of MusicMaster has an export design editor that you can use to create customized exports for your music library. The design editor includes a feature for importing pre-made export designs. Rather than having you build the needed export design manually, we've provided a couple design templates you can import, greatly simplifying the process.

The design template files are named "MusicMaster_CCC_MS2ASC.xml" and "MusicMaster_XStudio.xml", and are placed in the folder (directory) where our application is installed. Locate this file and follow the steps outlined below.

> If you are using the DOS version of MusicMaster, refer to the the MusicMaster DOS Export topic for details on exporting your music library instead of these instructions.

Steps to Load and Use the Export Design

1. Copy the *MusicMaster_CCC_MS2ASC.xml* or *MusicMaster_XStudio.xml* file to your MMWin folder.

   > **Hint** If the export is for Maestro, copy the MusicMaster_CCC_MS2ASC.xml template. For dcsTools.com products, including XStudio, you can use either template but the MusicMaster_XStudio.xml template is recommended as it contains the additional fields Album and Year.

2. In the MMWin folder, find and open **MMExportDesignEditor.exe**.

3. Select your database and click **Open**.

4. Switch the *Design Type* to **Library Export** via the drop-down list.

5. Click **New**. Do not name or adjust the settings on the following screen - just click **OK**.

6. Click **File | Import**, select the file you copied in step 1 and click **Open**.

7. Click **File | Save**, then **File | Exit**.

   > After importing the template, you may need to review and make a few changes as field ID's in the xml document may be different than those in your database.

8. In MusicMaster, open the station data and go to **Dataset | Library | Export**. Here, you'll see either **New CCC MS2ASC** or **XStudio Export** export design, depending on which file you imported in step 6. Select it, check the categories you wish to export, set your path and file name (we've set them initially to a default value) and click **OK** to export the file.

5.4.1.1.1 MusicMaster DOS Export

Users of MusicMaster's original DOS program need to generate a file named **LIBRARY.ASC** with the MusicMaster **MS2ASC** utility. The resulting LIBRARY.ASC file will then need to be copied to a location where XStudio Voice Tracker can retrieve it for import. MS2ASC.EXE uses a file that the user creates and saves as MS2ASC.DEF. This is the same layout used to create a MAESTRO.MDB file. If you have created this file for Maestro, you can use it for XStudio Voice Tracker as well.

MS2ASC.DEF Layout

The typical MS2ASC file contains the following information -- notes in **[ ]** are for your information and are not part of the file.

```
I:\DCS\[Path that you want the LIBRARY.ASC file exported to]
99,@  ["99," allows you to enter custom text, in this case we're starting
1,1,4  [Cart number, start with the first character in the field and use
99     ["99" is a single blank space]
99
2      [Artist Name with no limit to the number of characters]
99
99
3      [Song Title]
99
98     [Carriage Return/Line Feed]
22     [Runtime (mm:ss)]
99,.0 [the following two lines will add ".00" to the end of the Runtime]
99,0
5,1,2 [Intro Time]
99
6,1,2 [Ending Type]
30     [Category Letter Code]
31     [Category File Number]
32     [Complete File Number]
99
99
99
99
99
8,2   [Gender Codes]
10    [Power Codes]
7     [Sound Codes]
77,1,7      [Theme Code 7 (?) beginning with the first though 7th charact
78,1,7      [Theme Code 8 (?) beginning with the first though 7th charact
99,M12345678901N12345678901  . [Note: after the last 1 there are two spa
98
99,M12345678901N12345678901
99,M12345678901N12345678901
99,M12345678901N12345678901          . [Note: after the last 1 there are 7 s
98
99,M12345678901N12345678901
99,M12345678901N12345678901
99,M12345678901N12345678901          . [Note: after the last 1 there are 7 s
98
99,   [Custom Text in this case is 79 blank spaces followed by a period (
98
99,
```

MusicMaster Song Field ID Numbers

For convenience, here's a list of published field numbers used by MusicMaster. You may wish to double-check your MusicMaster documentation to see if there are any recent changes.

ID	Field Description	Length
0	Sound Code or Gender Code Translation	See Notes
1	Cart Number	5
2	Artist Name	35

ID	Field Description	Length
3	Song Title	35
4	Album Title	64
5	Intro Time	8
6	Ending Type	4
7	Sound Codes	5
8	Gender Codes	5
9	Tempo Codes	3
10	Power Codes	3
11	Like Score	2
12	Burn Score	2
13	Match Field	3
14	Harmonic Song Keys	2
15	First Non-Blank Artist Keyword	6
16	Title TWord	6
17	Disc Number	8
18	Mark Status	1
19	Composer Name	64
20	Publishing Company	64
21	Arranger Name	64
22	Runtime (mm:ss)	5
23	Daypart Codes	7
24	Add Date (mm-dd-yyyy)	10
25	Test Date (mm-dd-yyyy)	10
26	Last Move Date (mm-dd-yyyy)	10
27	Last Move Category	1
28	Plays In Category	5
29	Index Number	6
30	Category Letter Code	1
31	Category File Number (ffff)	4
32	Complete File Number (c/ffff)	6
33	Simulcast Pointer	6

ID	Field Description	Length
34	Plays in Library	5
35	Content Flags	8
36	Notes Field	10
37	License Codes	10
38	Record Company	10
39	Record Order Number	10
40	Artist Keyword 1	6
41	Artist Keyword 2	6
42	Artist Keyword 3	6
43	Artist Keyword 4	6
44	Artist Keyword 5	6
50	Air Date (mm-dd-yyyy) (Music Logs Only)	10
51	Air Time (hh:mm:ss 24hr Clock) (Music Logs Only)	8
52	Weekday Code (1-7 Sunday = 1) (Music Logs Only)	1
53	Weekday Text Name (Music Logs Only)	3
54	Running in Seconds	4
55	Runtime (No Leading Zero)	5
56	Packet Status (X of Y)	8
57	Packet Status (PN)	2
58	Category/File Number/Packet (c/ffffPN)	8
60	Chart Position – This Week	2
61	Chart Position – Last Week	2
62	Chart Position – Two Weeks Ago	2
63	Total Weeks on Chart	2
64	Peak Chart Position	2
65	Weeks at Peak Position	2
66	Chart Peak Date (mm-dd-yyyy)	10
67	Year End Ranking	4
68	Chart Debut Date (mm-dd-yyyy)	10
69	Chart Note	8
70	Playlist Rotation	8

ID	Field Description	Length
71	Theme Code 1	32
72	Theme Code 2	32
73	Theme Code 3	32
74	Theme Code 4	32
75	Theme Code 5	32
76	Theme Code 6	32
77	Theme Code 7	32
78	Theme Code 8	32
79	First Non-Blank Theme Code	32
80	Fixed Trivia Line	64
81	Rotating Trivia Line 1	64
82	Rotating Trivia Line 2	64
83	Rotating Trivia Line 3	64
84	Rotating Trivia Line 4	64
86	Rotating Trivia Line 1 – Kill Date (mm-dd-yyyy)	10
87	Rotating Trivia Line 2 – Kill Date (mm-dd-yyyy)	10
88	Rotating Trivia Line 3 – Kill Date (mm-dd-yyyy)	10
89	Rotating Trivia Line 4 – Kill Date (mm-dd-yyyy)	10
90	Active Trivia Line	64
91	Memo	See Notes
98	Carriage Return/Line Feed	2
99	Blank Space or Custom Text	See Notes
101	Song Rest In Hours	4
102	Auto Move 1 – Date (mm-dd-yyyy)	10
103	Auto Move 2 – Date (mm-dd-yyyy)	10
104	Auto Move 3 – Date (mm-dd-yyyy)	10
105	Auto Move 4 – Date (mm-dd-yyyy)	10
106	Auto Move 1 – Category	1
107	Auto Move 2 – Category	1
108	Auto Move 3 – Category	1
109	Auto Move 4 – Category	1

ID	Field Description	Length
110	Move History 1 – Date (mm-dd-yyyy)	10
111	Move History 1 – Category	1
112	Move History 2 – Date (mm-dd-yyyy)	10
113	Move History 2 – Category	1
114	Move History 3 – Date (mm-dd-yyyy)	10
115	Move History 3 – Category	1

Notes

1. **Sound And Gender Code Translation Fields**. A Sound and Gender Code Translation Field can be used to specify a particular CD changer or DAT tape machine. This option converts certain Sound Codes or Gender Codes to text using the following format:

   0,[LENGTH],[FIELD][CODE][TEXT],[FIELD][CODE][TEXT], etc...

   The output will be left justified in a field of [LENGTH] spaces. [FIELD] should be "S" for Sound Code or "G" for Gender Code. [CODE] is the actual Sound or Gender Code (A..Z) to translate. The output will contain [TEXT] whenever [Code] appears in the specified [FIELD]. If a song contains more that one of the specified codes, the output will contain the first match found. For example, consider this Sound and Gender translation Field:

   "0, 5, SACD1, SBCD2, GXCART1, GYCART2"

   If the song contains Sound Code A, the output becomes "CD1." If the song contains Sound Code B, the output is "CS2." If the song contains Gender Code X, the output is "Cart1." If the song contains Gender Code Y, the output is "CART2." If the song doesn't contain any of these codes, the output file will contain five blank spaces.

2. **Blank Space or Custom Text File Format**.

99	A single blank space will be output
99,[CUSTOM TEXT]	The Custom Text will be output exactly as entered

3. **Standard Music Fields**. When specifying a field other than 0 or 99, use the following format in the configuration file to specify only a portion of the field:

   [FIELD ID NUMBER],[FIRST CHARACTER],[LENGTH]

[FIRST CHARACTER] and [LENGTH] are optional. If you include them, separate them with a comma. For example: Use "2" to output the entire Artist Name, "3,1,15" to output only the first 15 characters of the Song Title, or "50,7,4" to output only characters 7-10 of the Air Date (which is the year, since the Air Date uses the MM-DD-YYYY format).

5.4.1.1.2 MusicMaster CCC Export

Users of MusicMaster's Windows program can use this export definition to produce a
Computer Concepts' Maestro-compatible library export.

> After importing the template, you may need to review and make a few
> changes as field ID's in the xml document may be different than those in
> your database.

MusicMaster_CCC_MS2ASC.xml Layout

The sample export design template we've provided contains the following:

```xml
XMLOptions version="1.0" created="2013-10-30T13:47:55" updated="2013-10-30T13:47:56">
  <XDF>
    <properties>
      <version>101</version>
      <name>New CCC MS2ASC</name>
      <design_type>200</design_type>
      <output_type>1</output_type>
      <page_count>3</page_count>
    </properties>
    <design>
      <properties>
        <design_version>101</design_version>
        <output_type>1</output_type>
        <output_path>R:\DCS\aStation</output_path>
        <output_file>LIBRARY.ASC</output_file>
      </properties>
    </design>
    <pages>
      <page1>
        <properties>
          <name>Song</name>
          <user_name></user_name>
          <element_type>220</element_type>
          <field_count>40</field_count>
        </properties>
        <field1>
          <name>Fixed Text</name>
          <item_id>-10105</item_id>
          <data_type>0</data_type>
          <properties>
            <len>1</len>
            <text>@</text>
          </properties>
        </field1>
        <field2>
          <name>Maestro #</name>
          <item_id>112</item_id>
          <data_type>1</data_type>
          <properties>
            <comment>DSC #</comment>
          </properties>
        </field2>
```

```
        <field3>
          <name>Spacer</name>
          <item_id>-10102</item_id>
          <data_type>0</data_type>
          <properties>
            <len>2</len>
          </properties>
        </field3>
        <field4>
          <name>Artist</name>
          <item_id>101</item_id>
          <data_type>1</data_type>
          <properties>
            <len>35</len>
            <comment>Artist</comment>
          </properties>
        </field4>
        <field5>
          <name>Spacer</name>
          <item_id>-10102</item_id>
          <data_type>0</data_type>
          <properties>
            <len>2</len>
          </properties>
        </field5>
        <field6>
          <name>Title</name>
          <item_id>102</item_id>
          <data_type>1</data_type>
          <properties>
            <len>35</len>
            <comment>Title</comment>
          </properties>
        </field6>
        <field7>
          <name>Spacer</name>
          <item_id>-10102</item_id>
          <data_type>0</data_type>
          <properties>
          </properties>
        </field7>
        <field8>
          <name>Line Break</name>
          <item_id>-10103</item_id>
          <data_type>0</data_type>
          <properties>
          </properties>
        </field8>
        <field9>
          <name>Run Time</name>
          <item_id>12</item_id>
          <data_type>13</data_type>
          <properties>
            <comment>Run Time</comment>
          </properties>
        </field9>
        <field10>
          <name>Fixed Text</name>
          <item_id>-10105</item_id>
          <data_type>0</data_type>
```

```
        <properties>
          <len>3</len>
          <text>.00</text>
        </properties>
      </field10>
      <field11>
        <name>Intro</name>
        <item_id>105</item_id>
        <data_type>1</data_type>
        <properties>
          <len>2</len>
          <comment>Intro</comment>
        </properties>
      </field11>
      <field12>
        <name>Spacer</name>
        <item_id>-10102</item_id>
        <data_type>0</data_type>
        <properties>
        </properties>
      </field12>
      <field13>
        <name>Ending</name>
        <item_id>106</item_id>
        <data_type>1</data_type>
        <properties>
          <len>2</len>
          <comment>Ending</comment>
        </properties>
      </field13>
      <field14>
        <name>Category</name>
        <item_id>3</item_id>
        <data_type>99</data_type>
        <properties>
          <comment>Category</comment>
        </properties>
      </field14>
      <field15>
        <name>Spacer</name>
        <item_id>-10102</item_id>
        <data_type>0</data_type>
        <properties>
          <len>15</len>
        </properties>
      </field15>
      <field16>
        <name>Gender</name>
        <item_id>108</item_id>
        <data_type>34</data_type>
        <properties>
          <len>2</len>
          <comment>Demographics</comment>
        </properties>
      </field16>
      <field17>
        <name>Power</name>
        <item_id>110</item_id>
        <data_type>31</data_type>
        <properties>
```

```
          <len>3</len>
          <comment>Sound</comment>
        </properties>
      </field17>
      <field18>
        <name>Spacer</name>
        <item_id>-10102</item_id>
        <data_type>0</data_type>
        <properties>
          <len>14</len>
        </properties>
      </field18>
      <field19>
        <name>Fixed Text</name>
        <item_id>-10105</item_id>
        <data_type>0</data_type>
        <properties>
          <text>M12345678901N12345678901</text>
        </properties>
      </field19>
      <field20>
        <name>Spacer</name>
        <item_id>-10102</item_id>
        <data_type>0</data_type>
        <properties>
          <len>2</len>
        </properties>
      </field20>
      <field21>
        <name>Fixed Text</name>
        <item_id>-10105</item_id>
        <data_type>0</data_type>
        <properties>
          <len>1</len>
          <text>.</text>
        </properties>
      </field21>
      <field22>
        <name>Line Break</name>
        <item_id>-10103</item_id>
        <data_type>0</data_type>
        <properties>
        </properties>
      </field22>
      <field23>
        <name>Fixed Text</name>
        <item_id>-10105</item_id>
        <data_type>0</data_type>
        <properties>
          <text>M12345678901N12345678901</text>
        </properties>
      </field23>
      <field24>
        <name>Fixed Text</name>
        <item_id>-10105</item_id>
        <data_type>0</data_type>
        <properties>
          <text>M12345678901N12345678901</text>
        </properties>
      </field24>
```

```
      <field25>
        <name>Fixed Text</name>
        <item_id>-10105</item_id>
        <data_type>0</data_type>
        <properties>
          <text>M12345678901N12345678901</text>
        </properties>
      </field25>
      <field26>
        <name>Spacer</name>
        <item_id>-10102</item_id>
        <data_type>0</data_type>
        <properties>
          <len>7</len>
        </properties>
      </field26>
      <field27>
        <name>Fixed Text</name>
        <item_id>-10105</item_id>
        <data_type>0</data_type>
        <properties>
          <len>1</len>
          <text>.</text>
        </properties>
      </field27>
      <field28>
        <name>Line Break</name>
        <item_id>-10103</item_id>
        <data_type>0</data_type>
        <properties>
        </properties>
      </field28>
      <field29>
        <name>Fixed Text</name>
        <item_id>-10105</item_id>
        <data_type>0</data_type>
        <properties>
          <text>M12345678901N12345678901</text>
        </properties>
      </field29>
      <field30>
        <name>Fixed Text</name>
        <item_id>-10105</item_id>
        <data_type>0</data_type>
        <properties>
          <text>M12345678901N12345678901</text>
        </properties>
      </field30>
      <field31>
        <name>Fixed Text</name>
        <item_id>-10105</item_id>
        <data_type>0</data_type>
        <properties>
          <len>24</len>
          <text>M12345678901N12345678901</text>
        </properties>
      </field31>
      <field32>
        <name>Spacer</name>
        <item_id>-10102</item_id>
```

```
              <data_type>0</data_type>
              <properties>
                <len>7</len>
              </properties>
            </field32>
            <field33>
              <name>Fixed Text</name>
              <item_id>-10105</item_id>
              <data_type>0</data_type>
              <properties>
                <len>1</len>
                <text>.</text>
              </properties>
            </field33>
            <field34>
              <name>Line Break</name>
              <item_id>-10103</item_id>
              <data_type>0</data_type>
              <properties>
              </properties>
            </field34>
            <field35>
              <name>Spacer</name>
              <item_id>-10102</item_id>
              <data_type>0</data_type>
              <properties>
                <len>79</len>
              </properties>
            </field35>
            <field36>
              <name>Fixed Text</name>
              <item_id>-10105</item_id>
              <data_type>0</data_type>
              <properties>
                <len>1</len>
                <text>.</text>
              </properties>
            </field36>
            <field37>
              <name>Line Break</name>
              <item_id>-10103</item_id>
              <data_type>0</data_type>
              <properties>
              </properties>
            </field37>
            <field38>
              <name>Spacer</name>
              <item_id>-10102</item_id>
              <data_type>0</data_type>
              <properties>
                <len>79</len>
              </properties>
            </field38>
            <field39>
              <name>Fixed Text</name>
              <item_id>-10105</item_id>
              <data_type>0</data_type>
              <properties>
                <len>1</len>
                <text>.</text>
```

```
          </properties>
        </field39>
        <field40>
          <name>Line Break</name>
          <item_id>-10103</item_id>
          <data_type>0</data_type>
          <properties>
          </properties>
        </field40>
      </page1>
      <page2>
        <properties>
          <name>File Header</name>
          <user_name></user_name>
          <element_type>201</element_type>
          <field_count>0</field_count>
        </properties>
      </page2>
      <page3>
        <properties><name>File Footer</name>
          <user_name></user_name>
          <element_type>211</element_type>
          <field_count>0</field_count>
        </properties>
      </page3>
    </pages>
  </XDF>
</XMLOptions>
```

5.4.1.1.3 MusicMaster XStudio Export

Users of MusicMaster's Windows program can use this export definition to produce an XStudio-compatible library export.

> After importing the template, you may need to review and make a few changes as field ID's in the xml document may be different than those in your database.

MusicMaster_XStudio.xml Layout

The sample export design template we've provided contains the following:

```xml
<XMLOptions version="1.0" created="2016-03-03T12:05:55" updated="2016-03-03T12:05:55">
  <XDF>
    <properties>
      <version>101</version>
      <name>XStudio Export</name>
      <design_type>200</design_type>
      <output_type>1</output_type>
      <page_count>3</page_count>
    </properties>
    <design>
      <properties>
        <output_file>Library.txt</output_file>
        <filter_plugin></filter_plugin>
        <design_version>101</design_version>
        <output_type>1</output_type>
        <file_append>0</file_append>
        <output_path>J:\Muscimaster_DB\</output_path>
        <file_encoding></file_encoding>
        <use_temp_file>0</use_temp_file>
      </properties>
    </design>
    <pages>
      <page1>
        <properties>
          <name>Song</name>
          <user_name></user_name>
          <element_type>220</element_type>
          <field_count>13</field_count>
        </properties>
        <field1>
          <name>Media2</name>
          <item_id>134</item_id>
          <data_type>1</data_type>
          <properties>
            <len>4</len>
            <comment>Cart No</comment>
          </properties>
        </field1>
        <field2>
          <name>Spacer</name>
          <item_id>-10102</item_id>
          <data_type>0</data_type>
```

```
      <properties>
        <comment>Space 1</comment>
      </properties>
    </field2>
    <field3>
      <name>Title</name>
      <item_id>104</item_id>
      <data_type>1</data_type>
      <properties>
        <len>70</len>
        <comment>Title</comment>
      </properties>
    </field3>
    <field4>
      <name>Artist</name>
      <item_id>102</item_id>
      <data_type>1</data_type>
      <properties>
        <len>70</len>
        <comment>Artist</comment>
      </properties>
    </field4>
    <field5>
      <name>Run Time</name>
      <item_id>12</item_id>
      <data_type>13</data_type>
      <properties>
        <comment>Runtime</comment>
      </properties>
    </field5>
    <field6>
      <name>Spacer</name>
      <item_id>-10102</item_id>
      <data_type>0</data_type>
      <properties>
        <comment>Space 1</comment>
      </properties>
    </field6>
    <field7>
      <name>Category</name>
      <item_id>3</item_id>
      <data_type>99</data_type>
      <properties>
        <len>16</len>
        <comment>Category</comment>
      </properties>
    </field7>
    <field8>
      <name>Album</name>
      <item_id>107</item_id>
      <data_type>1</data_type>
      <properties>
        <len>70</len>
        <comment>Album</comment>
      </properties>
    </field8>
    <field9>
      <name>Peak Year</name>
      <item_id>148</item_id>
      <data_type>2</data_type>
```

```
            <properties>
              <comment>Year</comment>
            </properties>
          </field9>
          <field10>
            <name>Spacer</name>
            <item_id>-10102</item_id>
            <data_type>0</data_type>
            <properties>
              <comment>Space 1</comment>
            </properties>
          </field10>
          <field11>
            <name>Intro1</name>
            <item_id>110</item_id>
            <data_type>1</data_type>
            <properties>
              <len>3</len>
              <comment>Intro</comment>
            </properties>
          </field11>
          <field12>
            <name>Spacer</name>
            <item_id>-10102</item_id>
            <data_type>0</data_type>
            <properties>
              <comment>Space 1</comment>
            </properties>
          </field12>
          <field13>
            <name>Ending</name>
            <item_id>109</item_id>
            <data_type>1</data_type>
            <properties>
              <len>3</len>
              <comment>Ending</comment>
            </properties>
          </field13>
        </page1>
        <page2>
          <properties>
            <name>File Header</name>
            <user_name></user_name>
            <element_type>201</element_type>
            <field_count>0</field_count>
          </properties>
        </page2>
        <page3>
          <properties>
            <name>File Footer</name>
            <user_name></user_name>
            <element_type>211</element_type>
            <field_count>0</field_count>
          </properties>
        </page3>
      </pages>
    </XDF>
</XMLOptions>
```

5.4.1.2 Exporting POWERGOLD

Exporting POWERGOLD information for use by XStudio Voice Tracker is straightforward. If you are using POWERGOLD 2000 or later, follow these steps:

1. From the POWERGOLD 2000 main menu choose **File | Database | Export | To POWERGOLD DOS v7 Song.Dat File**.

2. Click [**OK**] at the message that pops up.

3. In the "**Select Export Directory**" box, browse to the place where you want the Song.Dat file to be created and click [**OK**].

If you are using the DOS version of POWERGOLD, copy the SONG.DAT file located in your POWERGOLD directory to a location that XStudio Voice Tracker can read the file from.

5.4.1.3 Exporting Selector

Selector™ is a registered trademark of Radio Computing Systems, Inc.

> These instructions are a reprint of the Computer Concepts Corporation documentation published on their web site, dated 9/14/2000. Sections that apply specifically to Maestro operations have been removed.

Export Setup

The following steps should be taken to successfully export your Selector Database to update your music inventory:

1. From Selector's main menu choose "**Report Generator**".

2. Create a new report (example: **Billboard**)

3. In Song Design Format, Press [**F7**] for the "Punctuation" Screen.

4. Set up '**@**' in byte 1 on line 1, then set up '**.**' in byte 80 on lines 2-6.

Example Selector™ Song Punctuation Display

Punctuation	Line	Column	Length	Font
@	1	1	1	A
.	2	80	1	A
.	3	80	2	A
.	4	80	1	A
.	5	80	1	A
.	6	80	1	A

Note: Font for all parameters must be **A**.

Save your screen. **Select Song Design Format** and set up the following:

Line	Col	Length	Description
1	2	4	Cart Number **
1	8	37	Artist
1	45	48	Title
2	1	7	Length of Song (MM:SS.T)
2	8	4	Intro

Line	Col	Length	Description
2	12	2	Ending
2	14	1	Category
2	15	15	Category Name
2	30	2	Role
2	32	1	Mood
2	35	5	Sound Code
2	40	7	Hook In
2	47	7	Hook Out
2	55	24	Monday Dayparting
3	1	24	Tuesday Dayparting
3	25	24	Wednesday Dayparting
3	49	24	Thursday Dayparting
4	1	24	Friday Dayparting
4	25	24	Saturday Dayparting
4	49	24	Sunday Dayparting
5	1	76	Song Notes Line #1
6	1	76	Song Notes Line #2

> Cart Number comes from the field chosen by the user to store the 4-digit XStudio, DCS, or Maestro cart number in, such as cart number or media number. Users may wish to use Media and retain the CD and Track Numbers in their original Fields.

To Export the Selector.Dat File

1. Go to #8 off the main screen of Selector to report generator and values in the generator.

2. Choose the report you created.

3. Press [**F5**], and **Select All**.

4. Press [**F9**] and #2 to send file to the **Print File Manage**r.

5. Press [**F9**] again and select **Jump to Print File Manager**.

6. With your Report Name highlighted at the top of the screen, press [**F4**]. Now you will see a gray bar toward the bottom of the screen. This is where you will type your path – an example is: **R:\DCS\KCCC\Selector.dat**

7. Press [**F2**] to copy the report.

The file you create stays in the Print File Manager until they are deleted. For maintenance purposes you should delete the older files with each export.

Update the Selector.dat file whenever you add songs into Selector.

5.4.1.4 Generic dcsTools (XStudio) Export

If you are not using one of the directly-supported music scheduling systems, you can construct an export from that system that can be used by dcsTools.com products.

> The Generic dcsTools (XStudio) Export structure cannot be used with the Maestro automation system. Use one of the exports created specifically for Maestro.

The generic music library export consists of a single line of fixed-length field text for each song with no header or footer information, commonly referred to as Fixed-Length ASCII. The default output file extension is *.txt*.

Generic dcsTools Song Record Structure

The record structure Field column identifies the type of data expected - note the actual field name in your music scheduling system may be different, particularly the Cart Number field, which is often placed in a user-defined field in the scheduling system.

Fields labeled "**Spacer (1)**" are not contained in the database, but are needed in the output file for proper positioning of the fields in the song record.

The Length column identifies the maximum length used for a particular field. If your scheduling system field for the item is not as long as the specified length, the item must be padded with spaces. If longer, it must be truncated (shortened) to the maximum number of characters specified for the field.

If a field listed is not available in your music scheduling system's song record, you must pad that item with spaces, similar to the Spacer items except for the full length of the field.

Field	*Position*	*Length*	*Description*
Cart Number	1	4	The cart number, a unique ID for the Song. Must match the automation system identifier.
Spacer (1)	5	1	A 1-character blank space. Used for readability.
Title	6	70	The song title.
Artist	76	70	The song's artist.
Run Time	146	5	The song's run time (length), in the format *mm:ss* (2-digit minutes, colon, 2-digit seconds).

Field	Position	Length	Description
Spacer (1)	151	1	A 1-character blank space. Used for readability.
Category	152	16	The category the song is assigned to. Most music scheduling systems use 1 or 2 characters.
Album	168	70	The name of the album the song appeared in.
Year	238	4	The release year or peak year in 4-digit format (i.e., 2016).
Spacer (1)	242	1	A 1-character blank space. Used for readability.
Intro	243	3	The song's intro time, typically 2-3 characters and may include a colon (i.e., ":12").
Spacer (1)	246	1	A 1-character blank space. Used for readability.
Ending	247	3	The song's ending type code.

5.4.2 Importing Music Database Information

The XStudio Voice Tracker music database import functionality is accessed in Preferences on the Music Data tab.

> To import your music database, you first need to export the music information from your music scheduling system. Supported music scheduling systems include Selector™, Music Master and POWERGOLD (others may be added in the future). If you are using Maestro and have already exported the music data for use within Maestro, you can use the same file. See the section on Exporting Data from your Music Scheduling System for more information on setting up and executing the export.

Importing is started via a menu toolbar, similar to the sample shown.

Click on the [**Import Music**] button. A dialog appears for selection of the type of music database file you are going to import.
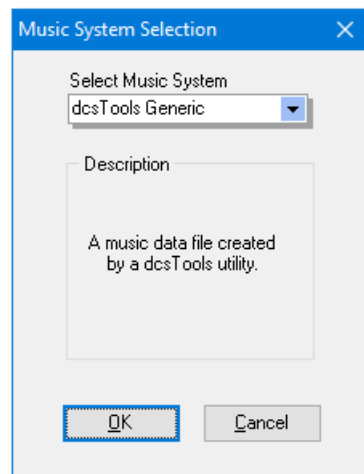
Music data file type selection

Select the type of music data file that you will be importing for use with XStudio Voice Tracker and click on the [**OK**] button.

A new dialog is displayed for selecting the file to import. Select the file and click on the [**OK**] button.

If needed, you will be prompted to provide a name for the imported data file – the file that will contain the imported (converted) music data base for use by XStudio Voice Tracker. Click on the [**OK**] button to begin the import process.

During the import process, a status window shows you the progress of the import.
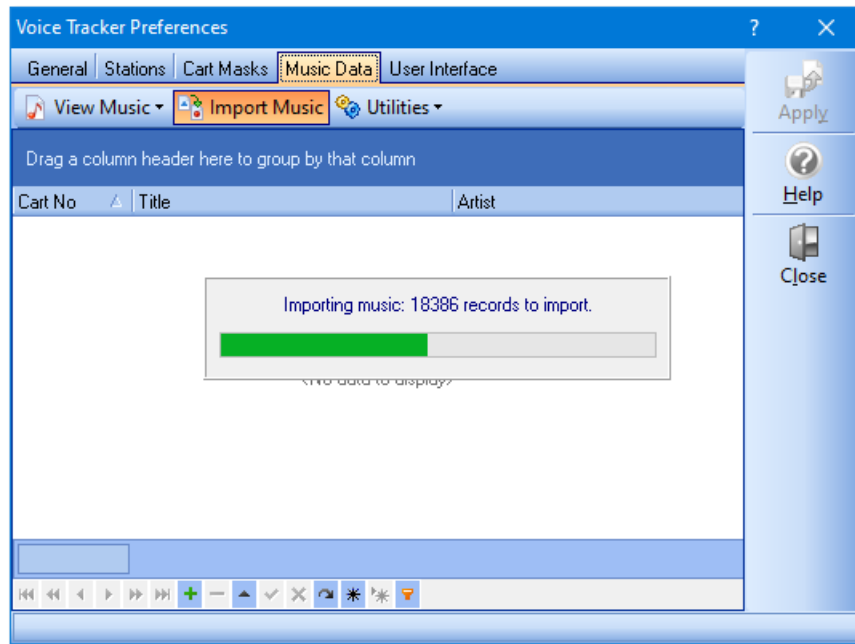
Importing a music database

When the import is complete, the imported music data is displayed, ready to be reviewed.

Some music databases may have some duplicate cart numbers. This occurs if cart numbers are erroneously assigned or sometimes, where a cart number is re-used when a song is taken out of the play rotation. Duplicate cart number handling is different when appending records to existing data versus the imported data replacing all existing music data.

1) **Appending Records**. If duplicate carts are found, each instance of the duplicate updates the music record. The effect is that the information of the **last duplicate found** in the source data becomes the content of the music record.

2) **Inserting Records**. If duplicate carts are found, only the first record encountered during the import is placed in the database. All others are discarded.
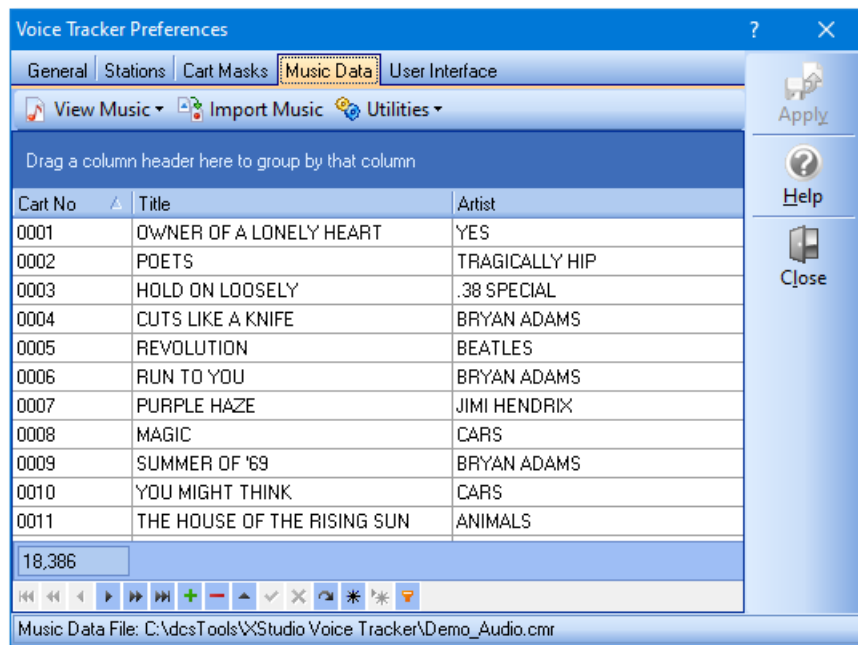
Music data displayed after import

Once imported, the data can be manually changed – you can add, edit and delete songs as well as perform bulk maintenance procedure, including proper-casing the music. See the topic Preferences - Music Data for details on managing an imported music database.

5.5   Station Definition - Step-by-Step

Defining a station that you will be using XStudio Voice Tracker do show preparation for is a fairly simple task, although there are a number of pieces of information needed. Here, we'll walk through creation of a station definition, step-by-step. Many of the station properties you'll be setting have custom pop-ups to assist in the task – where applicable, examples of what those pop-ups look like and how they are used are included.

To define a new station for voice-tracking – or to edit an existing station – you must first enter open the Preferences dialog and select the Stations tab. From the main screen's menu, select **Edit | Preferences** and click on the tab named "**Stations**". For this step-by-step description, we'll assume no stations have yet been defined.

Initially, the Stations page looks similar to the example shown here:
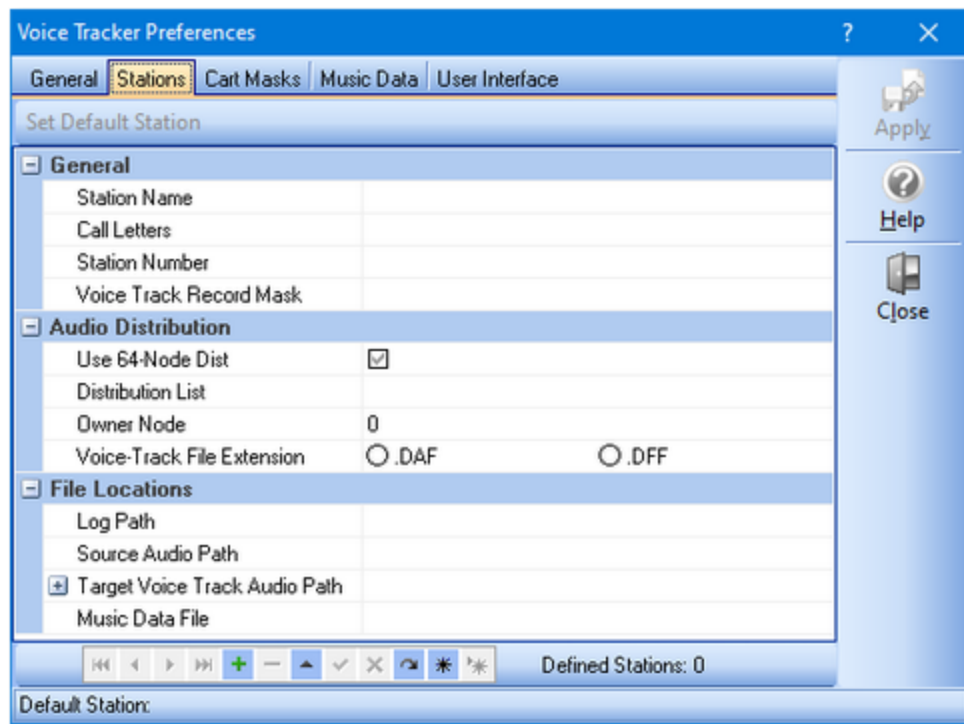
Near the bottom of the page is a "navigator bar" that is used for adding, editing and deleting stations, among other things. For more information on the data navigators used in XStudio Voice Tracker, refer to the Data Navigators topic.

Step 1 – Add a new Station

Using the navigator, click on the "**Insert**" button, which uses a plus symbol (+) for identification. A new station record is created and the cursor is positioned at the first item that needs to be filled out, as shown.
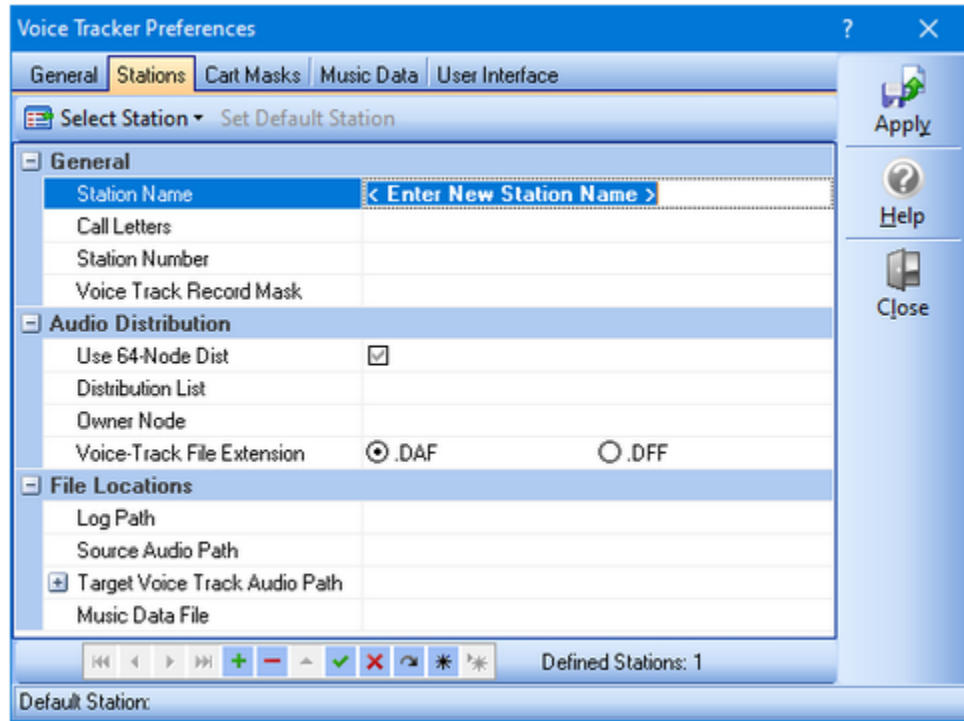
Step 2 – Enter Station Name
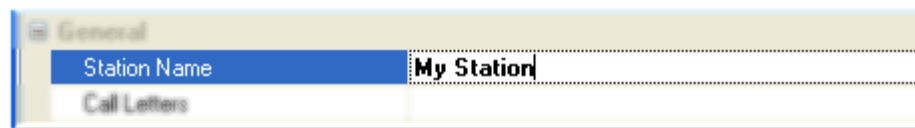
The initial text for the Station Name is merely suggesting you need to type something – in this case, a name that is used as a reference only for the station you are defining. You can enter up to 30 characters. Enter a name of your choosing and press the [**Enter**] key. The cursor advances to the next field (property).

Step 3 – Enter Call Letters

Enter the official call letters of the station – or a short slug identifier if preferred. The maximum length is 7 characters. The call letters are included with the Station Name (above)

in lists of the stations for ease in selection. When you have filled in the information, press the [**Enter**] key. The cursor advances to the next field.

Step 4 – Enter Station Number

The Station Number is a 2-character value used in program log file names to identify logs for this station. You must enter 2 characters. A typical example is "**S1**" – if you're unsure what is needed, check with the traffic person, program director or engineer who handles the station you're defining for guidance on what is needed. When finished, pressed the [**Enter**] key. The cursor advances to the next field.

Step 5 – Create Voice Track Record Mask(s)

On entering this field, something different happens – a panel pops up, similar to the example shown.
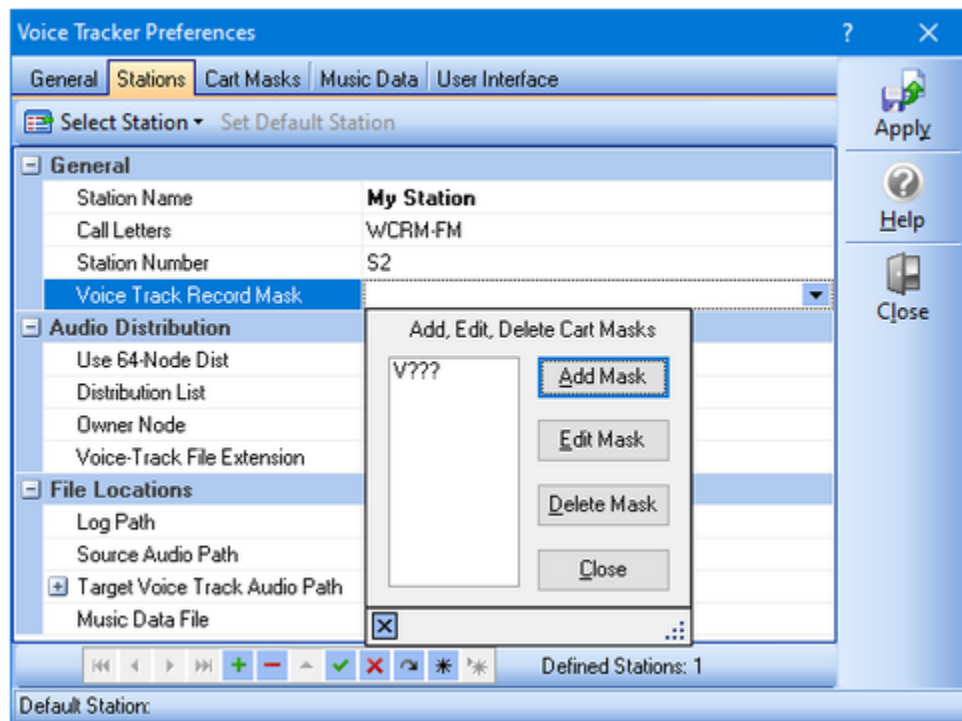
This property is essentially a list of groupings, called cart masks, that identifies for XStudio Voice Tracker which cart numbers on a program log are voice-track carts that will be recorded.

> ⚠️ It is important that this group of carts is properly identified, as only items on the log whose cart numbers match these settings can be recorded or modified.

The Cart Mask Edit Panel ([more info](#)) is used as a convenience. Click on the [**Add**] button. You are prompted to enter a cart mask, which is double-checked when you confirm your mask entry. If the mask you entered is validated, it is added to the list of masks. For more detailed information on cart mask rules, see the [Cart Masks Explained](#) topic.

You can add as many masks as necessary to make sure all voice track cart numbers are included in this grouping. When you have finished, click on the [**Close**] button in the Cart Mask Edit Panel.

To move on to the next field, press the [**Tab**] key or use the mouse to select it.

Step 6 – Setting the Cart Distribution Model

The property (field) labeled "**Use 64-Node Dist**" is, by default, unchecked. This means that only 16 audio work stations (nodes) are eligible to receive voice-track carts created by XStudio Voice Tracker. If the broadcast facility where the station we are defining uses more than 16 audio work stations, check this item. When finished, press the [**Enter**] key to advance to the next field.

Step 7 – Selecting Station Distribution

On entering this field, similar to the Voice Track Record Mask field, a pop-up panel is displayed, similar to the example shown.
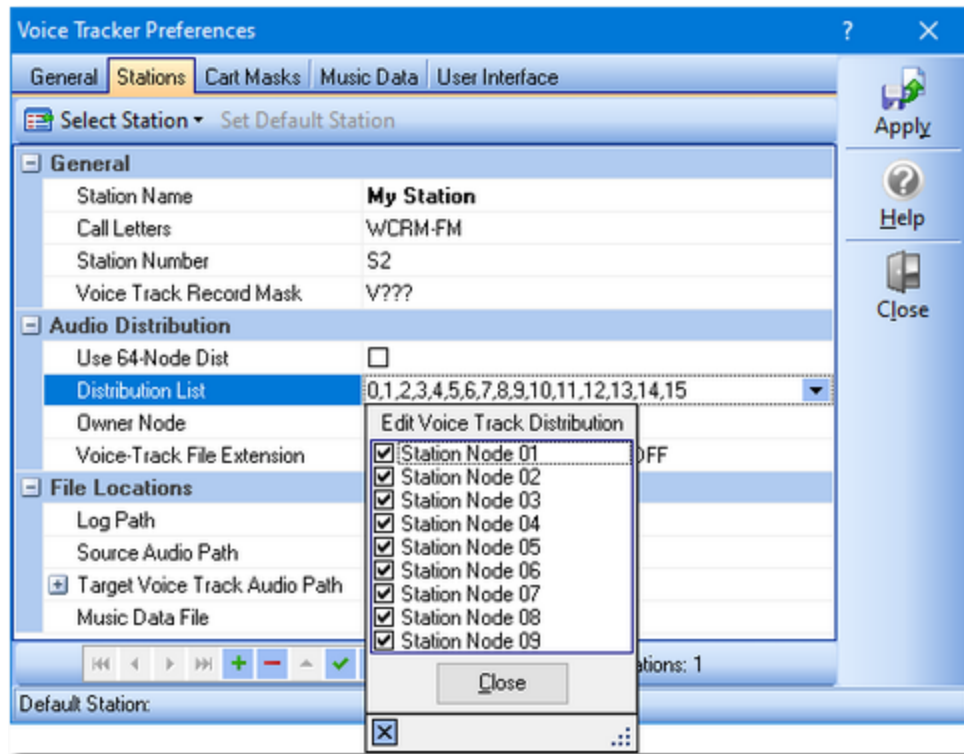
The Edit Distribution Panel is used to make selecting the audio work stations in the facility that need to receive voice-track carts created for this station easier and more understandable. In short, check the stations that should be able to play voice-track carts created for this station. The list of stations can be customized for ease in identifying work stations – for more detailed information, see the Using the Edit Cart Distribution Panel topic.

Step 8 – Select the Owner Node

The Owner Node property (field) is used to identify the work station that "owns" the voice track cars created for the station. It is applicable for "distributed audio" systems – sites that do not have either a Maestro or DCS system with ACP (Audio Central Plus) or XStudio. The default value is zero (0) – if you have an ACP system or are using XStudio, you can leave this value at the default. To change the value, either enter the zero-based node number or use the spin controls adjacent to the field. The maximum value that can be entered is determined by the Use 64-Node Distribution flag – if checked, the maximum value is 63, if unchecked, the maximum value is 15.

Step 9 – Select the Voice Track File Extension
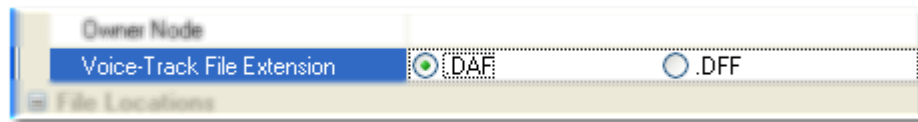
When a voice-track cart (audio file) for the defined station is created using XStudio Voice Tracker, the completed audio file's extension is controlled by this setting. The default value is .DAF. However, if the audio delivery system at the defined station's broadcast facility is an ACP system and you'll be putting finished voice-track carts directly into the ACP audio folders, select the .DFF option.

Step 10 – Enter or Select the Log Path
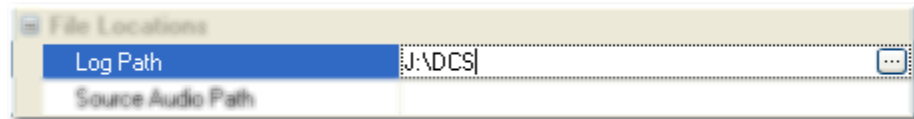
This property (field) identifies the location of program log files for the defined station. You can either enter a path by typing or use the button adjacent to the field to select the path from a pop-up dialog.

Step 11 – Enter or Select the Source Audio Path

In order to play non-voice-track carts (audio files) on a program log, XStudio Voice Tracker must have access to the files. This property (field) is the location of these files, which are used for rehearsal of the finished voice-track cart and for auto-tracking. You can either enter a path by typing or use the button adjacent to the field to select the path from a pop-up dialog. If you are working remote from the station, it's likely the music, jingles, commercials, etc. are located on your PC. If you are working within a station facility, more than likely the music files are located on a server. In either case, you must have at least file read privileges in the selected folder.

> The XStudio Voice Tracker audio engine runs as a service application and as such, has no knowledge of any "mapped" drives – a drive letter assigned to a folder on a PC other than the one the audio engine is running on. Therefore, in order for the audio engine to be able to play

or record files that are located on another PC, the paths to those folders must be entered using UNC notations. As an example, instead of using "**P:\Audio**" as the path, use the UNC notation: **\ \Remote_PC_Name\Share_Name\Audio** in the path property field.

Step 12 – Enter or Select the Target Voice Track Audio Path

Any voice-track carts (audio files) that you create using XStudio Voice Tracker are placed in the folder you specify in this field. This folder can be the same location as the Audio Source Path if desired – and normally would be if you're using XStudio Voice Tracker within a broadcast facility. On the other hand, if you're working remotely, it would be advisable (and probably desirable) to place the completed voice-track carts (audio files) in a different folder – mainly for ease in transferring them from your location to the station site. You can enter a path by typing or use the button adjacent to the field to select the path from a pop-up dialog.

Step 13 – Enter or Select a Voice Track Xfr Path (Optional)

This property is normally collapsed and not visible as it is an option associated with the Target Voice Track Audio Path. To make the field visible, click on the expand button [**+**] adjacent to the Target Voice Track Audio Path property. If a path is entered for this property, a copy of all newly-created voice-track carts is placed in the folder specified by this property. This folder location might be used as a gathering point for voice-track carts that are to be transferred to another location using a daemon or application that transfers files and deletes them after transfer. While the Target Voice Track Audio Path above could be used, if the external application that copies the voice-track files to another location also deletes them after copying, you would no longer be able to rehearse the finished voice-track cart once the external program finishes copying and deleting it.

Step 14 – Enter or Select a Music Data File (Optional)

The use of an imported music data file is optional. If one is used for the defined station, its fully-qualified file name is entered in this field. A button adjacent to the field can be used to display a file selection dialog. If this field is filled in, XStudio Voice Tracker will attempt to open the specified music data file when opening a log for the defined station. The information in the music data file is used to display song title and artist information on the log. For information on importing music database information for use with XStudio Voice Tracker, see the section on Importing Music Data.

> **Hint** If no music data file has been created (imported) for the station you are defining, you can leave it blank initially. After saving (posting) the station information, you can select the station from a drop-down menu on the Music Data tab. Since no music data file was defined for the station, XStudio Voice Tracker will prompt you, asking if you want to import a database file for the station.

Step 15 – Post the Information

When all fields have been filled in, you let XStudio Voice Tracker know you're done working with the station's information by posting (committing) the data. Until edited station properties are posted, changes that have been made can be canceled without changing the original values (if any) of the station's properties. Click on the [**Post**] button, one of the buttons in the data navigator near the bottom of the dialog. Posting edited records enables Preferences' [**Apply**] button – visual indication your settings have changed. To make the changes permanent, click on the [**Apply**] button. Should you not apply the changes, you'll be prompted to save them on exiting Preferences.

5.6   Using the Audio Transport Controls

All of the audio playback and record controls in XStudio Voice Tracker are grouped together on a toolbar. In addition, each control has a keyboard shortcut key for those who prefer using the keyboard versus clicking on buttons. As a default, the audio transport toolbar is located adjacent to the audio playback and record timers, as shown here – however, you can re-locate them anywhere you wish on the main display - see the topic Working with Toolbars for more information.
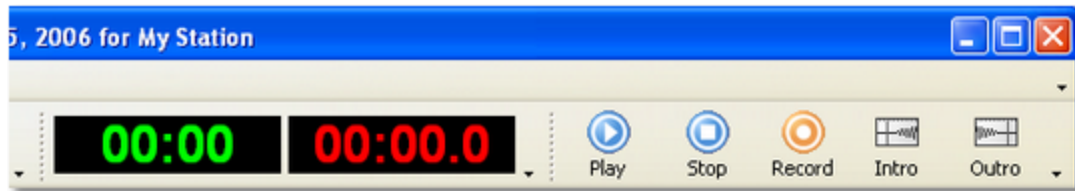
Here's an explanation of each of the audio transport buttons, along with their shortcut key (see the Keyboard Shortcuts topic for a full list of keyboard shortcuts).

Play Button [F2]

Playback actions vary, depending on what audio item is selected and whether or not Auto-Track mode is enabled.

Auto-Track Enabled & Selected Log Item is a Voice-Track Cart. In this case, XStudio Voice Tracker "backs up" to the audio element immediately preceding the voice-track cart and plays the Outro. When the Aux Mark is encountered, the voice-track cart begins playing. When the voice-track cart's Aux Mark is encountered, the next audio element on the log is started. XStudio Voice Tracker continues playing audio, segueing from one element to another, until you stop playback.

Auto-Track Enabled & Selected Log Item is NOT a Voice-Track Cart. The selected item begins playing. Playback continues, including segues to the next audio element, until you stop playback.

Auto-Track Disabled. With Auto-Track disabled, the selected item begins playing. No segue occurs when the Aux Mark is encountered. Playback stops when end-of-audio is reached for the selected cart.

Stop Button [F3]

Stop actions are always the same – the oldest playing audio item is stopped. If no audio items are playing, nothing happens. If more than one audio item is playing, pressing the [**Stop**] button repeatedly continues to stop the oldest playing item until there are no more items to stop.

Record / Stop Record Button [F4]

The Record button is a toggle, meaning its action changes based on whether or not a voice-track is being recorded. If nothing is recording, pressing the button starts a recording – but only if a voice-track cart is selected on the log. If a voice-track cart recording is active, pressing the button stops the recording. See the topics [Auto-Tracking](#) and [Manual Recording](#) for step-by-step descriptions and instructions.

Play Intro Button [F5]

If an audio element is selected on the log, the first few seconds (the Intro) is played. Play length is determined by the Intro Play Length value set in Preferences. The Auto-Track state, enabled or disabled, has no effect on playback behavior.

Play Outro Button [F6]

If an audio element is selected on the log, the last few seconds (the Outro) is played. Play length is determined by the Outro Play Length value set in Preferences. If Auto-Track is enabled, the next element on the log is played when the Aux Mark is encountered; otherwise, playback stops when the cart reaches end-of-audio.

> Outro play length is measured backwards from the Aux Mark, if the Aux Mark setting is non-zero. Otherwise, the Outro play length is measured backwards from the end of the audio file.

5.7   Using the Cart Mask Edit Panel

Some portions of XStudio Voice Tracker require the entry of cart masks for one purpose or another. When cart masks need to be added, edited or deleted, the Cart Mask Edit Panel is displayed.
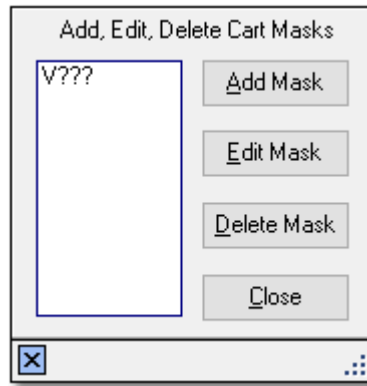
The panel is intended to make the tasks associated with cart mask maintenance easier and more fool-proof with buttons for adding, editing and deleting cart masks.

Add Mask Button

When the Add Mask button clicked, a dialog appears for entry of the new cart mask. The entered mask is validated to ensure it meets cart mask rules before being accepted and added to the cart mask list.

Edit Mask Button

To edit a cart mask in the list, select the item to be edited and click on the Edit Mask button. The mask text appears in a dialog for editing. The revisions are validated to ensure the changes meet cart mask rules before being accepted.

Delete Mask Button

To delete a cart mask in the list, select the item to be deleted and click on the Delete Mask button. The selected cart mask is immediately removed from the list.

Close Cart Mask Edit Panel Button

Click when finished editing cart masks to close the panel and update the cart mask field contents.

5.7.1 Cart Masks Explained

Cart masks are used to identify carts (audio files) that might be grouped together. A cart mask must be exactly 4 (four) characters in length. Mask entry dialogs will not allow entries that are too short and will not accept more than 4 characters entered.

The "**?**" (question mark) or the "*****" (asterisk) characters are "wildcards", meaning a letter or number is valid in its position in the mask. The "**?**" and "*****" characters can be used interchangeably as they have the same meaning in cart mask evaluation. A third wildcard that can be used is the "**#**" (pound sign) character. When used in a cart mask, only numbers (0 through 9) are valid in its position in the mask. These are the only wildcard characters allowed for a cart mask - all other characters will be interpreted literally.

Valid characters for a cart mask, besides the "**?**" (question mark), "*****" (asterisk) and "**#**" (pound sign) include the letters **A .. Z**, the numbers **0 .. 9** and the characters "**{**", "**}**" and "**!**" (exclamation).

A valid cart mask will include one or more "**?**", "*****", or "**#**" characters (although it doesn't have to) and other letters or numbers that match up with cart types that you wish to have grouped together. Examples of valid cart mask include:

| Mask	Result
C???	Carts beginning with the letter "C" and any 2nd, 3rd and 4th character will be included.
PR??	Carts with the first two characters of "PR" and any 3rd and 4th character will be included.
?R??	Carts with any first character, a second character of "R" and any 3rd and 4th characters will be included.
Z?A?	Carts with a first character of "Z", any 2nd character, a third character of "A" and any 4th character will be included.
VT##	Carts with the first two characters of "VT" and a number in the 3rd and 4th characters will be included.
C***	Carts beginning with the letter "C" and any 2nd, 3rd and 4th character will be included.
C??#	Carts beginning with the letter "C", containing any character in the 2nd and 3rd positions, and a number (0 through 9) in the 4th position will be included.
####	Only carts with a number (0 through 9) in each character position will be included.

Hint A cart mask of "**????**" or "********" is the same as saying "any cart number is valid" and should not be used, as all carts would match such a mask.

Combining a number of cart masks for use in a cart category will group all carts that meet at least one of the cart masks. For instance, you could have a filter called "**R** Carts" that has 4 cart masks - "**R???**", "**?R??**", "**??R?**" and "**???R**". The result of using this cart filter would be that every cart in the inventory that has the letter "**R**" in any character position (1st, 2nd, 3rd or 4th) would be a match.

5.8   Using the Clock

The XStudio Voice Tracker clock is a floating window used to display the current time in either military or standard AM/PM time formats.
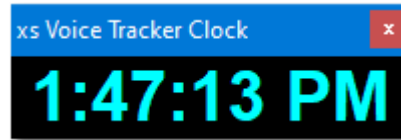
XStudio Voice Tracker Clock

The clock is disabled (hidden) as a default and does not display the very first time XStudio Voice Tracker is launched. When XStudio Voice Tracker is closed, the clock state (shown/hidden, position, colors and size) is recorded and restored the next time XStudio Voice Tracker is started.

Showing or Hiding the Clock Display

To show or hide the clock, select the main menu item **View | Show Clock**. The menu item is checked when the clock is displayed.

The menu item acts as a toggle, alternately hiding and displaying the clock. The clock state is stored on program exit and restored on program start-up.

Changing the Clock Appearance

You can modify the clock appearance, including the time display type, size of the text, text color and background color. To do so, [**Right-Click**] on the clock time text to display the clock properties menu.
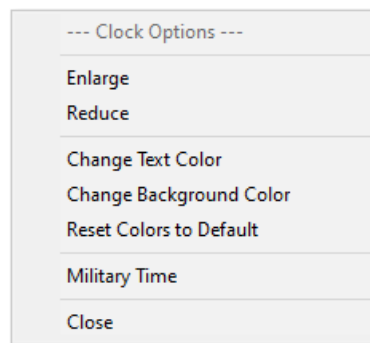

Select the item you wish to change. Depending on the item you choose, the change will either be made immediately or you'll be prompted to make an option selection. Review details of each menu item for the clock display in the following table.

Menu Item	*Description*
Enlarge	The text size of the displayed time is made larger, up to a maximum of 54 points. The text size can also be enlarged using the [**UpArrow**] and [**+**] keys on the numeric keypad when the window is active.
Reduce	The text size of the displayed time is made smaller, down to a minimum of 13 points. The text size can also be reduced using the [**DnArrow**] and [**-**] keys on the numeric keypad when the window is active.
Change Text Color	Displays a <u>color customization dialog</u> to choose the color of the clock's time text.
Change Background Color	Displays a <u>color customization dialog</u> to choose the color of the clock's background.
Reset Colors to Default	Resets the clock's time text and background color to XStudio Voice Tracker defaults.
Military Time	Toggles the time display between standard AM/PM and military time.
Close	Hides the XStudio Voice Tracker clock and backtimer (if enabled).

5.9 Using the Color Customization Dialog

The Color Customization Dialog is a standard Windows dialog for selecting and/or creating colors, similar to the example shown here.
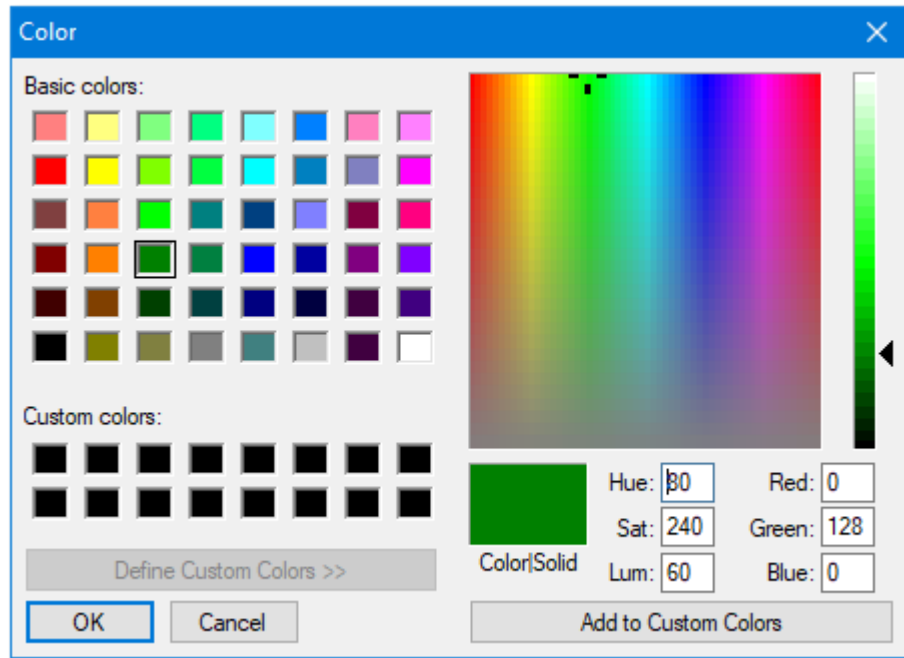

All of the standard methods for creating custom colors are available in this dialog. You can visually create a color by clicking on the color spectrum display, then moving the gradient marker, or you can manually enter a color value as a set of numbers, either based on the RGB values or Hue, Saturation, and Luminescence values.

If you find that you are consistently using a particular custom color, you may wish to write down the RGB values for that color to make it easier the next time you want to duplicate it. You can also add a newly-created color to the "custom colors" panel, but remember these settings are not persistent between sessions - if you exit the software, the custom color is not saved.

5.10 Using the Edit Cart Distribution Panel

The Edit Cart Distribution Panel is used in XStudio Voice Tracker to simplify the task of selecting audio work stations in a facility that are to receive voice-track carts for a defined station. Depending on other settings, the list will contain either 16 or 64 work stations.
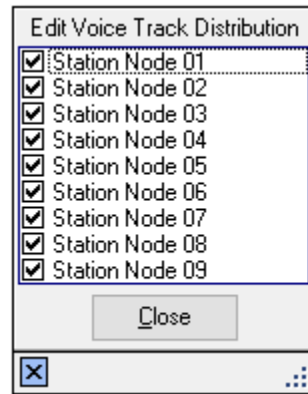
Usage is simple – checked work stations in the list receive voice-track carts. In other words, they are a part of the "distribution" of the voice-track carts.

Customizing Work Station Names

To make it easier to identify audio work stations in a station's broadcast facility, the text for each work station name in the list can be edited. [**Double-Click**] on the item in the list whose name you wish to edit. A dialog appears, allowing you to make changes. When you're finished editing the name, click on the dialog's [**OK**] button to save the changes.

> **Hint** Work stations in the list are sorted in node number order. The 1st name in the list corresponds to node number 1 (or zero – 0 – under the covers in DCS and Maestro).

5.11 Using the Event Log Configuration Dialog

As XStudio Voice Tracker runs, information relating to its performance and problems encountered is written to a group of application event logs. The event logs are text files maintained automatically by XStudio Voice Tracker in the form of event logs for each day, with a default of 14 days (14 daily files) being available for review at all times. Event logs are generally used in troubleshooting problems or determining why XStudio Voice Tracker behaved in a certain way. Review the topic on viewing application event logs for additional information.

You can modify the default settings for the amount of detail information is stored and for how many days. To do so, select the main menu item **Help | Troubleshooting | Configure Event Logging**. The Event Log Preferences dialog is displayed, similar to the example shown.
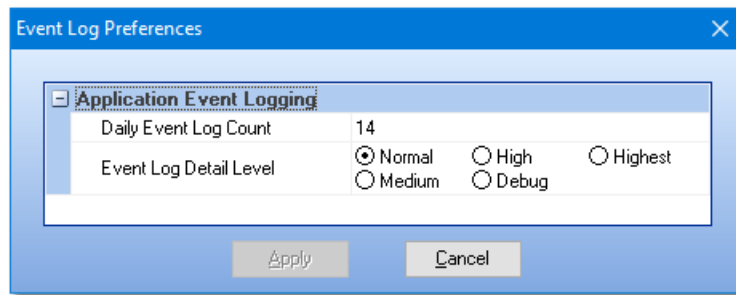
Event Log Preferences Dialog

Make the changes you wish and click on the [**Apply**] button to save the changes. XStudio Voice Tracker will immediately make the requested changes.

| *Property*	*Description*
Daily Event log Count	The default is to keep daily event logs around for 14 days. Use the spin-edit control that appears when you begin editing the property to increase or decrease the number of days you wish to keep daily event logs. The minimum number of days is 7, the maximum number is 62.
Event Log Detail Level	The default detail level is "**Normal**". As you change the detail level to Medium, High, Debug, and Highest, XStudio Voice Tracker logs more and more information to the daily event log. The higher the detail level, the larger the daily event log file size will be. For troubleshooting, you should set the detail level to "**Debug**" as a minimum.

5.12   Using the Intro Countdown Panel

Using the Intro Timer is optional and depends on the log you are working with having intro times included in the music items.

Enabling the Intro Timer

To enable and make visible the Intro Timer, select the menu item **View | Intro Timer**. Checking the item enables the timer, unchecking disables the timer.
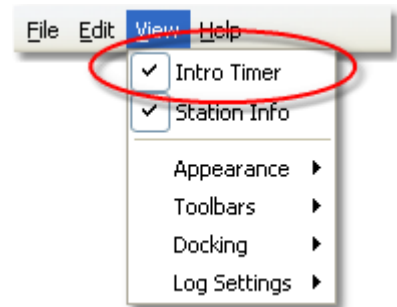
When the Intro Timer has been enabled, each time a log item with a valid intro time is played, either normally or as an intro play, the timer is activated. The countdown begins with the log intro value and counts down each second.

Intro Timer Enabled

> Even if the Intro Timer is hidden from view, it is activated each time a valid intro time is found for a log item. Therefore, if you enable the Intro Timer in the middle of playback and there's still intro time remaining, the countdown will be correct.

Using the Intro Timer

As the Intro Timer is running, it counts time down each second. As the remaining time gets closer to zero, the timer color changes, similar to the examples shown.
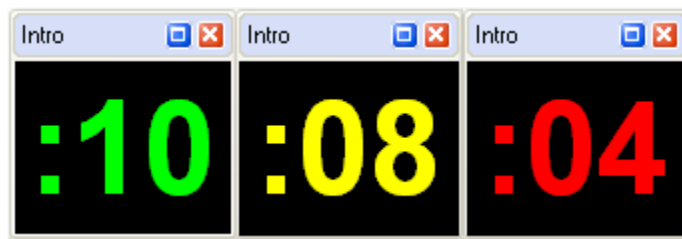
Intro Timer Color Changes - Docked

The timer remains visible at all times when enabled, even though the countdown may have reached zero.

The panel containing the Intro Timer can be moved, re-sized and even floated if desired. You can position the panel anywhere you wish - it's position and size will be remembered and used the next time you launch XStudio Voice Tracker.

As the panel is re-sized, the count down text grows or shrinks as needed to fit within the panel.

Hint Clicking on the [**X**] on the panel hides it - to restore the panel visibility, use the menu item located under the main menu **View** item.

5.13   Using the Station Info Panel

Using the Station Info panel is optional - if used, it displays the currently-selected station and call letters.

Enabling the Station Info Panel

To enable and make visible the Station Info panel, select the menu item **View | Station Info**. Checking the item displays the panel, un-checking the item hides the panel. The Station Info panel is displayed immediately above the log as a default.
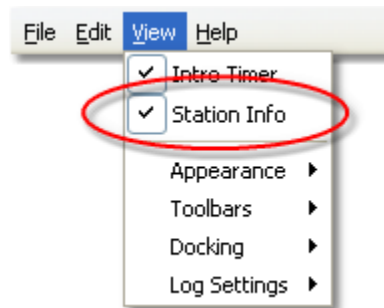
Station Info Display Enabled

Using the Station Info Panel

The Station Info panel text is automatically updated each time you select and open a log. The selected station name and call letters are displayed in the panel as the "current station", similar to the example shown.

Station Info Panel - Floating

The panel containing the Station Info can be moved, re-sized and even floated, as shown in the example. You can position the panel anywhere you wish - it's position and size will be remembered and used the next time you launch XStudio Voice Tracker.

As the panel is re-sized, the information text grows or shrinks as needed to fit within the panel.

> **Hint**   Clicking on the [**X**] on the panel hides it - to restore the panel visibility, use the menu item located under the main menu **View** item.

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Troubleshooting

Part VI

XStudio Voice Tracker has been designed to be as trouble-free as possible and has been thoroughly tested. However, not every usage scenario can be anticipated. This section is intended as a starting point diagnosing and solving problems, but should not be viewed as an all-encompassing source of problem resolution.

If the difficulty you're experiencing is not covered here, contact the dealer who provided you with XStudio Voice Tracker first. Alternatively, you can contact dcsTools.com. See the topic on technical support for additional information.

Common Problems

AV Starting or Closing	My countdown timer has disappeared
I can't play audio	
I can't start the audio engine	My voice-track carts won't record
	Trouble Saving Files

Viewing the XStudio Voice Tracker Event Log

When you run XStudio Voice Tracker, actions the program takes, along with actions you take, are recorded to a file in the XStudio Voice Tracker application directory. You can view the file while using XStudio Voice Tracker by selecting **Help | View Application Event Log**, or view it later using a standard text editor like NotePad. The application event logging file name is documented in the topic List of Files. The application event log view is similar to the example shown.
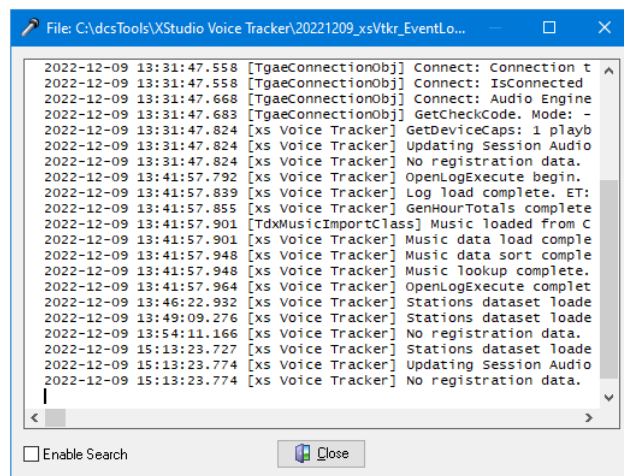
Use the horizontal and vertical scroll bars to navigate the display. Standard [**PgUp**] and [**PgDn**] keystrokes work, too. You can search for specific text in this dialog by checking the "**Enable Search**" item, which reveals a panel for entering the text to search for, setting search direction and other options.

> **Hint** When viewing text, you can assign up to 10 temporary bookmarks. To assign a bookmark, use the keystroke combination [**Ctrl-Shift**] + **0** to **9**. A small marker becomes visible in the left margin of the line. To jump to a bookmark, use the keystroke [**Ctrl**] + **0** to **9**. Bookmarks are lost when the dialog is closed.
>
> You can also enlarge & reduce the event log text size. Use the plus "**+**" or minus "**-**" keys or [**Right-Click**] to select a text size from the pop-up menu.

Reviewing Event Logs Outside of XStudio Voice Tracker

Since the XStudio Voice Tracker event log is a text file, you can use virtually any text editor or text file viewer to review the information.The event log file is stored in the XStudio Voice Tracker application folder using a naming convention of:

yyyymmdd_xsVtkr_EventLog.txt

The "*yyyymmdd*" portion of the file name corresponds to the year, month and day. As a default XStudio Voice Tracker retains daily event logs for 14 days.

6.1 Audio Engine Troubleshooting

This topic is intended to assist in diagnosing and correcting unusual problems with the XStudio Voice Tracker audio engine.

> ⚠️ Some techniques involve manually modifying the registry. It is strongly urged that the sections of the registry that pertain to the XStudio Voice Tracker audio engine be backed up before they are modified. See the Registry Information topic for details on where information is stored.

The audio engine is installed as a Windows service and is set up to automatically start when the PC's operating system is loaded. This makes the audio engine available before any user login is performed on the host PC.

Current Audio Engine Version Numbers

File	*Version*
AudioEngine.exe	Version 1.99.76.101 (Build 20220112 - 13:34)
GenCodec.dll	No version info. Date: 01/12/2022 1:31 PM
NCTAudioCompress.dll	Version 1.7.8.0 Date: 2/11/2003 2:32 PM
asihpi32.dll	Version 4.30.13.0 Date: 9/17/2021 5:32 AM
aeRemote.dll	Version 1.0.0.1 Date: 01/12/2022 1:35 PM (Used by client applications, provided for completeness)

This version requires the Microsoft Visual C++ 2015-2019 Redistributable Package (x86), which is automatically installed by the dcsTools Audio Engine installer if not present on the host system.

6.1.1 Audio Engine Specific Problems

This section documents specific problems that may occur and the solution and/or work-around. Before applying any of the techniques described, you should check to be sure that you are running the latest version of XStudio Voice Tracker and double-check your application settings (Preferences) to ensure everything is correct.

6.1.1.1 Audio Engine Service Unresponsive

Symptom: The audio engine service is started and appears to be running, but client applications are unable to communicate with the audio engine.

Reviewing the application client event log indicates that the audio engine service is running. The client communications software, aeRemote.dll, loads OK according to the XStudio Voice Tracker event log, but when a connection attempt is made, the attempt times out after trying 10 or more times.

Solution 1 - TCP/IP Port Check

XStudio Voice Tracker communicates with the audio engine using TCP/IP on port **12042**. Another application may have control of this port or a firewall may be preventing communications on the port. You may have to consult with your LAN administrator to determine if either of these possibilities are the case.

Solution 2 - apt-X Encoder Check

Check to see if the apt-X encoder is installed with the audio engine. If apt-X is installed, check to see if the apt-X temporary time period has expired. It can be checked one of two ways:

1. Use the *apt-X Registration Utility* included in audio engine installations - the file name is aptX_RegDlg.exe.

2. Stop the audio engine service and launch the audio engine from a command window. See the topic on running the audio engine in console mode for instructions.

If an expired apt-X trial license is the issue, the apt-X registration dialog will appear using either of the two methods. Correct the problem by registering the software or removing it.

Solution 3 - Host PC Name Check

Check the client application's host PC name. If the computer name is longer than 15 characters, it is unlikely a connection can be made. To test, shorten the computer name to 15 characters or less. This problem occurs because of Microsoft's maximum computer name length of 15 characters for NetBios naming compatibility. It is why users are warned when they try to create a computer name longer than this limitation.

6.1.1.2 Audio Engine Slow Playback Response Time

It is possible that a combination of factors comes together to cause what might be called a "hesitation" in playback of audio when rehearsing sequences. If there is a noticeable delay between the time you click on the [**Play**] button and when you hear audio - on the order of 1/2-second or more, there are some things that can be done to improve response time.

The problem most generally manifests itself when the playback audio folder is on a remote machine, as would be the case with centrally-stored audio.

Here are some steps to try to improve response time - try them in order, shutting down the audio engine before making the changes, then restarting the audio engine and testing the change. It is recommended you make one change at a time to get a good sense of the effect of each change rather than making several changes and not knowing which of them may have fixed the problem.

1. **Change the audio stream buffer size**. The default audio stream buffer size is 32768 (32,768 bytes). Open the registry, locate the key *PlayBufferSize* (see the Registry Information section for details on its location) and change the value to 8196 (8,196 bytes). Relaunch the audio engine and test the playback start response. If the response is acceptable, shut the audio engine down and increase the value to 16384 (16,384 bytes). Re-test playback response. If it's still acceptable, try increasing the value to 24580 (24,580 bytes) and repeat the test. If playback response time is acceptable, leave the setting. If not, revert the setting back to the last value you tested that produced acceptable results.

> ⚠️ Lowering the *PlayBufferSize* value increases hard disk read frequency. The idea is to use the largest value possible while getting acceptable play start response time. This is particularly true of situations where the playback audio is stored on a central server - you want to keep disk access to a minimum to keep from "hammering" the central storage device any more than necessary.

2. **Change the pipe clock setting**. If you've changed the buffer size down to 8196 and are still not getting acceptable results, you can try changing the pipe clock setting. Note changing this value may cause some audio cards to fail altogether, including some Digigram models.

   Ensure the audio engine is shut down, then open the registry and locate the key *PipeClock*. See the Registry Information section for details on its location. Change the value from it's default of 44100 to 32000, restart the audio engine and test playback response. You can also try setting the value to 48000.

   By way of explanation, if the source playback audio was sample at 32kHz and the *PipeClock* setting is 44100 (44.1kHz), the audio engine is rate-converting, which adds some time to the process. The idea is to match this value to the value of the majority of the source audio.

> ⚠️ Changing the *PipeClock* value produces best results when you know all or most of the source playback audio was sampled at the same rate. For audio files produced on a DCS system, this would be 32000 (32kHz).

6.1.2   Specific Audio Card Issues

This section provides information on audio card issues that can occur, along with remedies or workarounds.

6.1.2.1 Audio Science (ASI) WDM Configuration

If you are having trouble playing or recording audio (particularly simultaneous play/record) with an ASI card using their WDM (WAVE) drivers, it most likely can be remedied by making changes to the input and output Windows Sounds properties. Note these changes are to the device Windows properties, not ASI's driver or card configuration properties.

1. Open the Sound Control Panel, either from **Control Panel (Sounds)** or by accessing it via the task bar - [**Right-Click**] on the sound (speaker) icon, then selecting the "**Sounds**" menu item from the pop-up menu. The Sound dialog will be displayed:
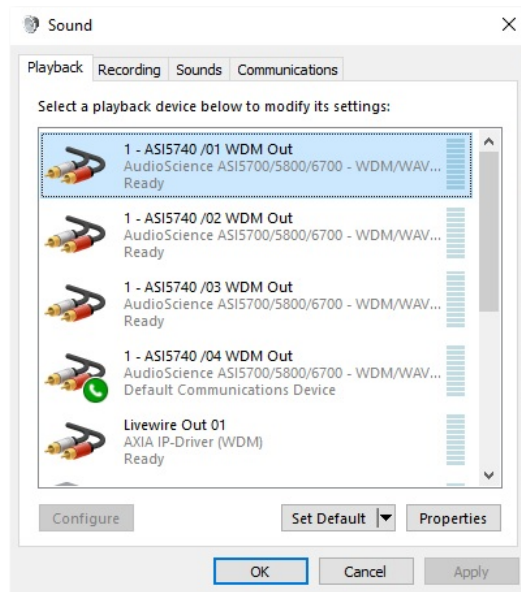
2. For each Playback output and Record Input (on the Playback & Recording tabs, respectively), select the item and click on the [**Properties**] button.

3. Select the **Advanced** tab, as shown:
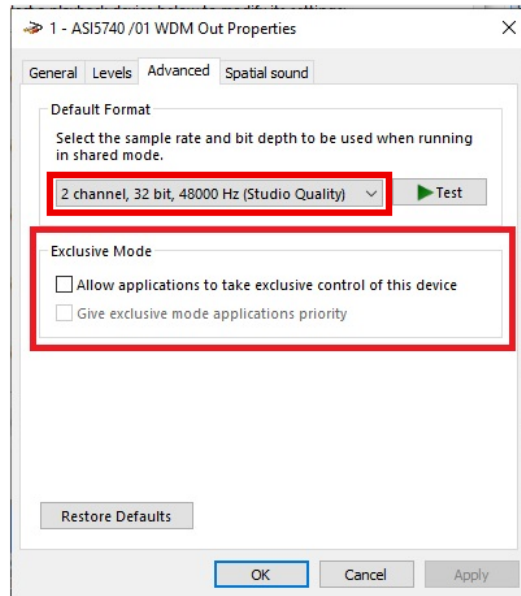
4. In the **Default Format** section, select the "**2 channel, 16 bit, 44100 Hz (CD Quality)**" option.

5. In the **Exclusive Mode** section, uncheck the "**Allow applications to take exclusive control of this device**" item. This will automatically disable the "**Give exclusive mode application priority**" item.

6. Save the changes (click on the [**Apply**] button).

Be sure to do this for each of the ASI WDM Out & ASI WDM In items in the dialog.

6.1.3 Audio Engine Manual Installation

The audio engine is normally automatically installed when the XStudio Voice Tracker is installed. Should there be a situation where it is not installed, or there's a need to manually-install the audio engine, here are basic steps that should be followed.

> ⚠️ The audio engine can be used only on Windows 7 and above operating systems. It will not run on older OS versions.

1. Files needed for manual installation:

   AudioEngine.exe

   GenCodec.dll

   NCTAudioCompress.dll

   asihpi32.dll

   aptX100.dll (**ONLY IF** apt-X is to be installed and licensed)

   pcgw32.dll (**ONLY IF** apt-X is to be installed and licensed)

It is important that the files come from the same release version of the audio engine. Review the Current Audio Engine Version Numbers for additional details.

> ⚠️ **Audio Engine Prerequisites**
> Beginning with version 1.99.76.101, the audio engine and client dll require the **Microsoft Visual C++ 2015-2019 Redistributable Package (x86)** be present on the host PC. To check whether or not it is installed, open Add/Remove Programs (or equivalent) in Control Panel. Look for the item "**Microsoft Visual C++ 2015-2019 Redistributable - x86**" followed by a version number. If not present you will need to download and install the software from Microsoft.

2. Copy all needed files to a common folder. All files must be in the same folder. The normal location for these files is "***x:\dcsTools\AudioEngine***", where "***x***" is the boot drive. Exceptions are the aptX100.dll & pcgw32.dll files, which can be located in the Windows path, although not recommended.

3. The NCT dll must be registered with the operating system. To register the dll, open a command window (DOS window) and navigate to the folder in which the NCT dll is located. At the command prompt, type the following: **regsvr32 NCTAudioCompress.dll** followed by the [**Enter**] key to register the dll.

4. The audio engine must be installed as a service. You can do this from a command window (DOS window), similar to the NCT dll registration. Open a command window and navigate to the folder in which the audio engine executable is located. At the command prompt, enter the following:

    audioengine /install

    Press the [**Enter**] key to install the service.

> To manually uninstall the audio engine from a command prompt, type the following:
>
> **audioengine /uninstall**
>
> Press the [**Enter**] key to uninstall the audio engine as a service.

Running the Audio Engine in Console Mode

For troubleshooting purposes, the audio engine can also be run in console mode. Ensure that the audio engine, if installed as a service, is not running before attempting to run it as a console application.

To start the audio engine as a console application, open a command window (DOS window), navigate to the folder containing the audio engine files, and enter the following at a command prompt:

audioengine /console

Press the [**Enter**] key to launch the audio engine. The audio engine will launch and the command window will display status information. The command prompt disappears.

> When running in console mode, the audio engine inherits the rights and privileges of the logged-on user, which may be different from the rights and privileges assigned to the audio engine when running as a service.

To stop the audio engine when running as a console application, press [**Ctrl-C**] in the command window. The audio engine will shut down and the command-prompt will reappear.

6.1.4   Audio Engine Registry Information

The audio engine uses the Windows registry to store its settings, including registration information. The base key for these settings is:

HKEY_LOCAL_MACHINE\SOFTWARE\dcsTools\AudioEngine

There are several sub-keys containing information about audio channels, available devices, and audio stream configuration.

> ⚠️ The base registry key is for 32-bit (x86) operating systems. If using a 64-bit OS (x64), you will find the entries in the **HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\dcsTools\AudioEngine** base key location.

All of the standard settings are automatically set and maintained by the engine with the exception of the registration information, which must be entered in order for the engine to run as a fully-licensed application. As a default, the audio engine will run 5 days from first launch in trial mode. After that, registration is required.

Some of the registry keys can be "tweaked" to correct or further diagnose problems. The following is a list of of registry settings used by the audio engine, along with a brief explanation as applicable.

Audio Engine Registry Settings

Key Name	_Default Value_	_Description_
HKEY_LOCAL_MACHINE\SOFTWARE\dcsTools		
CodeTraceLevel	Key does not exist.	DWord. This key is used to force the audio engine to create dump files for tracing codec problems. It is used primarily for determining why apt-X or MPEG errors are occurring, with messages like "codec not available".
		When the key is created and assigned a value of **2**, dump files with the naming syntax **GenCodecXXX.dmp** are created, with a new **XXX** value each time the audio engine is launched.
Registration Key	Key does not exist.	REG_SZ. Contains the user-entered registration key, which enables full

Key Name	*Default Value*	*Description*
		functionality of the audio engine. The audio engine as a default supports PCM, apt-X and MPEG encoding, although the apt-X encoding dll must be present and available.

HKEY_LOCAL_MACHINE\SOFTWARE\dcsTools\AudioEngine

Registration Key (Deprecated)	Key does not exist.	REG_SZ. Contains the user-entered registration key, which enables full functionality of the audio engine. The audio engine as a default supports PCM, apt-X and MPEG encoding, although the apt-X encoding dll must be present and available.
TraceLevel	Key does not exist.	DWord. This key must be added manually. It is used for troubleshooting and when present, increases the amount of information stored in the ***AudioEngine.dmp*** log file. To increase the logging detail, create this key as a **REG_DWORD** type and enter a value of **2**.

HKEY_LOCAL_MACHINE\SOFTWARE\dcsTools\AudioEngine\Channels

PipeClock	44100	DWord. The clock rate for audio handling. For Windows driver devices, this value can be changed, but for devices like the Digigram audio card, it must be left alone. Valid values are: 32000, 44100, and 48000

HKEY_LOCAL_MACHINE\SOFTWARE\dcsTools\AudioEngine\Device_x

(There could be more than one of these entries if a Digigram or AudioScience card is installed in the PC in addition to standard wave devices.

Key Name	Default Value	Description
DeallocateIdlePipes	Engine-maintained.	DWord = 1
DefaultRecordInput	Engine-maintained.	DWord = 0
EnableWatchdog	Engine-maintained.	DWord = 0
PlayPipeMask	Engine-maintained.	DWord = 4294967295
PreallocatePlayPipes	Engine-maintained.	DWord = 0
PreallocateRecordPipes	Engine-maintained.	DWord = 0
RecordPipeMask	Engine-maintained.	DWord = 4294967295
StreamCount	Engine-maintained.	DWord = 3
WatchdogTimeout	Engine-maintained.	DWord = 500

HKEY_LOCAL_MACHINE\SOFTWARE\dcsTools\AudioEngine\Devices

Device_1	0	DWord. 0 = WDM (WAVE) Driver. Device_1 contains wave device information. (Value 6 = Audio Science ASIO Driver)
Device_2	4294967295	DWord. 2nd device record.
Device_3	4294967295	DWord. 3rd device record.
Device_4	4294967295	DWord. 4th device record.
Device_5	4294967295	DWord. 5th device record.
Device_6	4294967295	DWord. 6th device record.

Key Name	*Default Value*	*Description*
Device_7	4294967295	DWord. 7th device record.
Device_8	4294967295	DWord. 8th device record.

HKEY_LOCAL_MACHINE\SOFTWARE\dcsTools\AudioEngine\Streams

Key Name	*Default Value*	*Description*
*xxx*BufferCount	8	DWord. The "*xxx*" portion is "Play" and "Record". The number of buffers allocated for audio data handling. The larger the number of buffers, the more memory consumed. If the BufferSize value is reduced, it may be beneficial to increase this value to something like **12**.
*xxx*BufferSize	32768	DWord. The "*xxx*" portion is "Play" and "Record". The size of each individual audio data buffer. Valid values can range from a low of 2048 to a high of 32768 (the default).
		Recommended values in case of a need to change would be on 4K boundaries - ie, 8192, 12288, 16384, 20480, 24576, 28672. General recommendation is to stick with 8K boundaries - 8192, 16384, 32768.
		This value, by observation, can have an impact on audio play response time. If the play source is a network drive and the buffer is the default, some delay in start of audio may be noticed as the buffer is being filled and decompressed. To improve response, reduce the buffer size. See the topic on [slow play response](#).
		Note: If using the Audio Science ASIO driver, these values should be set to 2048 (the minimum allowed size).

Key Name	Default Value	Description
MpegCodec	2	DWord.
RateConvertQuality	1	DWord.
UseMpegCodec	0	DWord.

6.1.5 Audio Engine Revision History

This topic documents older revisions of the XStudio Voice Tracker audio engine. This information may be helpful in determining if you are using the correct version of the audio engine.

Version 1.99.45.16 (Build 20120215 - 14:15)

All files used by this version of the XStudio Voice Tracker audio engine, including file version numbers and date stamps, are listed in the table below.

File	*Version*
AudioEngine.exe	Version 1.99.45.16 (Build 20120215 - 14:15)
GenCodec.dll	No version info. Date: 1/20/2012 12:03 PM
NCTAudioCompress.dll	Version 1.7.8.0 Date: 2/11/2003 2:32 PM
aeRemote.dll	Version 1.0.0.1 Date: 2/15/2012 2:16 PM (Used by client applications, provided for completeness)

This version required the Microsoft Visual C++ 2008 SP1 Redistributable Package (x86).

Version 1.90 (Build 20070630 - 17:48)

All files used by this version of the XStudio Voice Tracker audio engine, including file version numbers and date stamps, are listed in the table below.

File	*Version*
AudioEngine.exe	Version 1.90 (Build 20070630 - 17:48)
GenCodec.dll	No version info. Date: 6/28/2007 2:11 PM
NCTAudioCompress.dll	Version 1.7.8.0 Date: 2/11/2003 2:32 PM
aeRemote.dll	Version 1.0.0.1 Date: 6/26/2007 10:26 PM (Used by client applications, provided for completeness)

6.2 AV When Starting or Stopping XStudio Voice Tracker

If you are running XStudio Voice Tracker as standard user (one without administrative privileges), under certain circumstances you might get an error when starting up or closing down XStudio Voice Tracker. An error message similar to the example shown may appear.
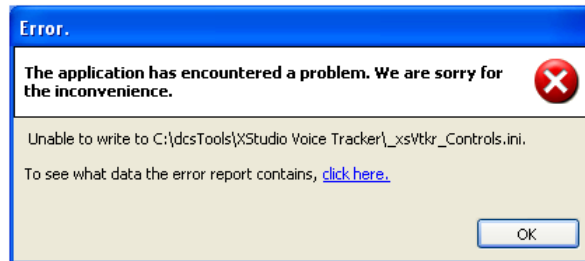
Note part of the example error text refers to being "Unable to write to...". This error typically means that the logged-on user does not have sufficient read and write privileges in the folder where XStudio Voice Tracker is installed. In order to use XStudio Voice Tracker, the logged-on user must have have privileges to read, write and create files in this folder.

When XStudio Voice Tracker starts up, some data files in the application folder are created or if present, updated. Similarly, when XStudio Voice Tracker is running or in the process of being shut down, preference settings are updated. If the logged-on user does not have sufficient rights in the folder, errors of this type will occur.

To correct the problem, the system administrator must add the needed privileges for the user or a group the user is a member of. In Windows XP, [**Right-Click**] on the XStudio Voice Tracker folder and selecting the "Security" tab. Modify a listed group or add a specific user with the appropriate privileges.

Displaying a folder's Security tab in Windows XP

If the "Security" tab does not appear in Windows XP, you can make it visible by opening Folder Options in Control Panel.

a) Click **Start**, point to **Settings**, and then click **Control Panel**.

b) Click **Appearance and Themes**, and then click **Folder Options**.

c) On the **View** tab, under **Advanced Settings**, clear (uncheck) the "***Use simple file sharing [Recommended]***" item.

d) Click on the [**Apply**] button.

You can alternatively use the Windows Explorer **Tools | Folder Options**... menu item to access the View tab settings.

6.3 Can't Play or Record Audio

There are a number of possibilities relating to XStudio Voice Tracker either not being able to play back or not being able to record audio. The most common problems and their solutions are covered in this topic – many of the issues that come up are related to working with audio files located on a computer other than the one running XStudio Voice Tracker.

Audio Engine Service is not Installed

XStudio Voice Tracker utilizes an audio engine that runs as a service application. The audio engine is automatically installed when XStudio Voice Tracker is installed. When XStudio Voice Tracker starts up, it checks to see if the audio engine service is installed – if not, you will see an error message indicating the service is not installed. To solve the problem, re-install XStudio Voice Tracker.

> ⚠️ You must have administrative privileges to install XStudio Voice Tracker. If the logged-in user does not have administrative privileges, the installation will abort without installing or updating any files.

Audio Engine Service is not Running

When XStudio Voice Tracker is installed, the audio engine service is installed and configured to automatically start when the computer starts up. A user or system administrator, however, can stop the audio engine or even disable it so that the audio engine will not start up automatically when the computer starts.

When XStudio Voice Tracker starts up, it checks to see if the audio engine service is installed, and if so, if it is running. If the service is not running, an attempt is made to start it. However, if the logged in user does not have enough privileges, the attempt to start the audio engine service will fail and you will see an error message to that effect.

If the audio engine service is installed, but XStudio Voice Tracker reports that it cannot start the service, contact your system administrator for assistance in starting the audio engine service.

A utility program, dcsTools Audio Engine Access Utility (aeSetAccess.exe), is installed with the audio engine and can be used to grant the needed privileges to a specific user or group. Then, when XStudio Voice Tracker is launched by that user or group member, the audio

engine service can be started by XStudio Voice Tracker.

> In order to use the dcsTools Audio Engine Access Utility, the logged-on user must have administrative privileges.

Incorrect Folder Locations for Source or Target Audio

It may be that you made an error in defining a station's source or target audio path. See the topic on station configuration or the step-by-step station configuration instructions. If the paths are correct but are located on another PC, the next section may help explain why you are having problems.

The Audio Engine cannot access folders on other PC's

If you define a station for voice-tracking and wish to play or record audio files that are located on a different PC, the problem is likely related to either user privileges or path definitions.

> The XStudio Voice Tracker audio engine runs as a service application and as such, has no knowledge of any "mapped" drives – a drive letter assigned to a folder on a PC other than the one the audio engine is running on. Therefore, in order for the audio engine to be able to play or record files that are located on another PC, the paths to those folders must be entered using UNC notations. As an example, instead of using "**P:\Audio**" as the path, use the UNC notation: **\\Remote_PC_Name\Share_Name\Audio** in the path property field.

It is possible that you have entered the paths properly, but that the remote PC refuses to allow access to the audio engine. This occurs because the audio engine service is installed with standard **System User** logon credentials. In order to be able to play and record audio located on another PC, the audio engine service logon must be changed to a username and password combination that is authorized and has the appropriate privileges on the remote PC.

> If you wish to play or record audio located on another PC, the audio engine service logon credentials must be changed. You must have administrative privileges to change the audio engine service logon information – if you do not have these privileges, contact your system administrator for help.

The Logged-In User cannot access folders on other PC's

In order to retrieve or save information about an audio file on a remote PC, the currently-logged-in user must have the appropriate privileges on the remote PC. If you suspect this is the problem you are having, contact your system administrator.

6.4   Can't Start the Audio Engine

When XStudio Voice Tracker is installed, the audio engine service is installed and configured to automatically start when the computer starts up. A user or system administrator, however, can stop the audio engine or even disable it so that the audio engine will not start up automatically when the computer starts.

When XStudio Voice Tracker starts up, it checks to see if the audio engine service is installed, and if so, if it is running. If the service is not running, an attempt is made to start it. However, if the logged in user does not have enough privileges, the attempt to start the audio engine service will fail and you will see an error message to that effect.

If the audio engine service is installed, but XStudio Voice Tracker reports that it cannot start the service, contact your system administrator for assistance in starting the audio engine service.

A utility program, dcsTools Audio Engine Access Utility (aeSetAccess.exe), is installed with the audio engine and can be used to grant the needed privileges to a specific user or group. Then, when XStudio Voice Tracker is launched by that user or group member, the audio engine service can be started by XStudio Voice Tracker.

> In order to use the dcsTools Audio Engine Access Utility, the logged-on user must have administrative privileges.

6.5   My Countdown Timer has Disappeared

If the Intro Timer (countdown timer) has disappeared, it's likely that you either disabled it deliberately or that you may have unintentionally clicked on the close button ([**X**]) of the panel containing the Intro Timer.

To make the Intro Timer visible again, use the main menu item **View** and make sure the item **Intro Timer** is checked, as shown here.
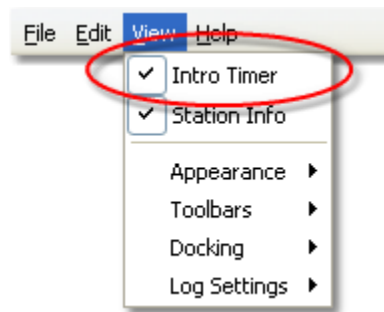
Intro Timer Enabled

See the topic on Using the Intro Timer for additional details on enabling, disabling, and using the countdown timer.

6.6 Trouble with saving files

If you are having trouble saving files, the most common causes are outlined in this topic.

Available Hard Disk Capacity

One reason you may have trouble saving files is a lack of free disk space. Check that you do have enough space on your hard drive to accommodate the file you are trying to save. When creating voice track files, they can grow quite large, depending of the length of recording and the storage method.

User Rights

In order to save files, you must have the appropriate privileges in the folder in which you wish to save the file. If you can see the folder and are sure there is enough available disk space, check with your administrator to be sure you have privileges to save files in the target folder.

6.7 User Account Control (UAC) Issues

Starting with the introduction of Windows Vista and subsequent operating system releases, Microsoft added a significant amount of additional security to these operating systems.

Generally referred to as **UAC** (**U**ser **A**ccount **C**ontrol), the sum of these changes dramatically affect named users who might be categorized as "standard" or "general" users. Areas that previously had been quite open, allowing these users to modify, create and delete items like files and registry entries are now protected as default. Users with standard rights and privileges on these systems are now as a default prevented from making changes in such areas as the Program Files folder, the Windows folder and in the Windows registry area known as *HKEY_LOCAL_MACHINE*.

> XStudio Voice Tracker does not use the Windows registry during normal operations. The only information stored in the registry is created when installing XStudio Voice Tracker and is used if you later decide to remove the software from the system.

In addition, Microsoft published numerous guidelines and usage information regarding these changes. Some of the guidelines would cause applications who require the end-user to be able to modify preference settings, etc., to place files in several locations on the PC. While these changes do enhance the overall security of the operating system, having files and information for a specific application spread all over the system in places not intuitive or easy to find creates a significant support burden for IT managers and the application vendor.

Over the years, we have chosen to try to keep all of our application's files, including those that store preferences, files containing run-time information like exception logging and activity detail, and small database files, in one location for ease in troubleshooting and housekeeping.

For these reasons, our applications are generally placed in a folder other than the Microsoft-recommended Program Files folder. As a default, these other folders historically have been "wide open" in the sense that any user could read, write and modify files.
However, depending on how tightly-secured a system is when running Vista or a later operating system, issues may arise that relate to user rights. The following points may assist you in locating problems with XStudio Voice Tracker when running one of these operating systems and the user reporting issues does not have administrative privileges.

1. Make sure that user having trouble with XStudio Voice Tracker has read, write, modify and delete privileges in the folder in which XStudio Voice Tracker is installed. These privileges might be assigned to an individual user but more commonly are assigned to a user group of which the user is a member.

2. If you are placing files in a location other than the XStudio Voice Tracker folder, file locations that are set up in the Preferences area, ensure that the named user has read, write, modify and delete privileges in that folder location.

3. One way that some issues can be overcome is to modify any XStudio Voice Tracker shortcuts to cause the application to be run under administrator privileges. [**Right-Click**] on the shortcut and select the menu item "Run as Administrator". A negative of this approach is that the end-user will more than likely have to enter an administrative password, which defeats the concept of administrative security as you'd have to provide the user with the password.

   Another approach some people use is to disable UAC. While this action more or less returns user accounts to the sort of status they had in previous versions of Windows, this too defeats the idea of enhanced operating system security.

4. If an application uses the registry, particularly the portion known as

HKEY_LOCAL_MACHINE, you may have to extend rights to specific keys that the application modifies or creates during normal usage. In order to add permissions to the registry, you will need to use **regedt32.exe**, the extended registry editor.

> In order to extend additional privileges to a user or user group, either in the file system or registry, you need be be logged on to the operating system as an administrator.

apt-X™ Issues

The apt-X encoder/decoder uses a software protection scheme that can be tricky to get working under Vista and later operating systems. A hidden file is created by the software, generally placed in either the Windows directory or the root folder of the boot-up drive. Additionally, registry entries are created and maintained in several places in the Windows registry, many of which are normally restricted in in later operating systems.
When setting up XStudio Voice Tracker, the apt-X installation, registration, etc., is done by a user with administrative privileges, so no problems occur initially. However, as soon as a user with "normal" privileges tries to use apt-X, errors occur because the underlying apt-X security system is trying to make changes in these prohibited areas.

Audio Engine Issues

Unlike the main XStudio Voice Tracker application, *the audio engine service does use the Windows registry* to store and retrieve settings. Thus, it is important that the audio engine service's log-on user account have read/write privileges in specific parts of the registry. See the topic on the [audio engine registry](#) for information on specific locations and keys.

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Contacting dcsTools.com

Part VII
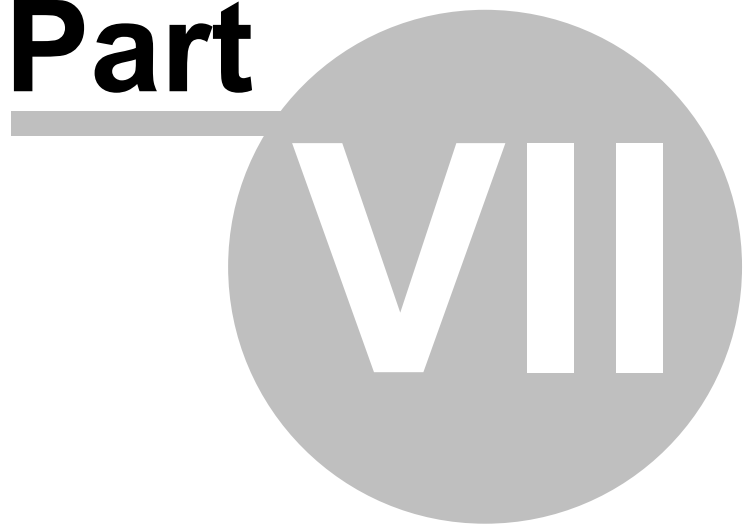
If you need to contact dcsTools.com, you can do so using one of the following methods. We are here to help, so do not hesitate to communicate with us when needed.

Mailing Address

C-R Media
8494 Saratoga Lane
Eden Prairie, MN 55347
USA

Telephone Information

Sales and Technical Support can be reached from 9:00 AM to 5:00 PM, U.S Central Time

Voice: 952-949-9450

FAX: 952-949-9448

Email Information

To contact us via email, use our on-line contact form. If you wish to use a standard email client, send correspondence to: rich@c-rmedia.com.

Technical Support

To contact technical support for our products, use the telephone numbers or email information provided above. You can also send an on-line product-specific email.

Web Site

Visit our web site for information on product updates and other products we offer.

Appendices

Part VIII

The topics in this section are supplemental to the the XStudio Voice Tracker documentation and contain information that may not be used on a day-to-day basis.

8.1   Registration

XStudio Voice Tracker requires a valid registration code to enable full use of the product. If you have purchased XStudio Voice Tracker, you should have received a registration code or instructions on how to obtain your registration code with your installation materials. The registration code contains the product serial number and is unique to each PC on which XStudio Voice Tracker is installed. Depending on whether or not you have additional encoding options installed, you may need to register the options as well.

XStudio Voice Tracker uses an audio engine that runs as a Windows service, which also requires registration.

Preparing to Register

In order to register XStudio Voice Tracker, you need to supply your vendor with information unique to the PC on which the software is installed. From the main display, select the menu item **Help | Get Machine ID for Registration**. A dialog is displayed, containing the ID's necessary to register the software.
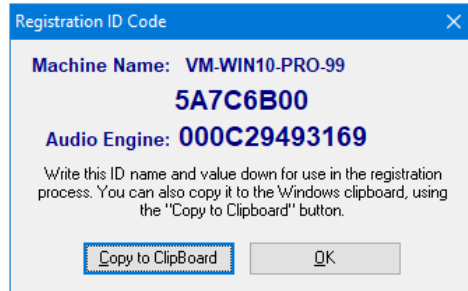
You will need to either write down the machine name, ID and Audio Engine ID or you can use the [**Copy to Clipboard**] button to copy this information to the Windows clipboard. If you use the clipboard method, you can paste the information into an email or a Notepad text document using the [**Ctrl-V**] keystroke.
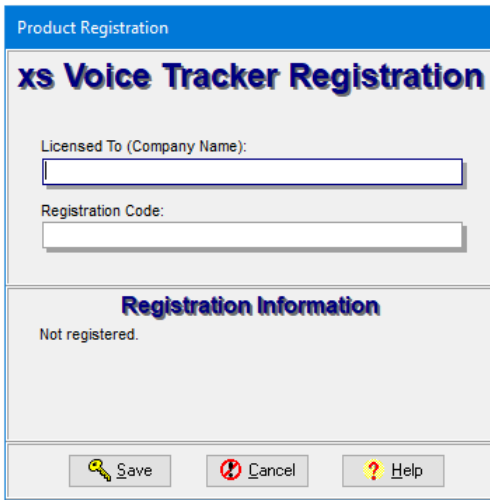
> **All three** (3) pieces of information are required to register XStudio Voice Tracker – the **machine name**, the **application ID** and the **Audio Engine ID**. If you also purchased the apt-X encoding option, a separate registration is required.

XStudio Voice Tracker Application Registration

Enter registration information by selecting **Help | Register | Register Application** from the main menu. You'll be presented with a dialog similar to the following:
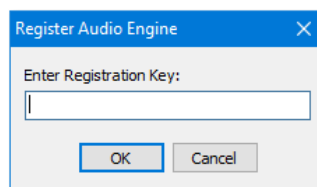

Fill in the User Name and Company Name fields as desired, and then enter the Release Key, exactly as it was supplied to you. Click on the [**Register**] button to save your registration information.

> **Hint**　If you received your registration release key electronically, you can copy it from the source document and paste it into the Registration Code field. Copy the key information in the source document, select the Registration Code field in the XStudio Voice Tracker Registration dialog, and use [**Ctrl-V**] to paste the key into the field.

XStudio Voice Tracker Audio Engine Registration

To register the audio engine, select **Help | Register | Register Audio Engine** from the main menu. You'll be prompted to enter the audio engine registration key:

Enter the registration key supplied by your vendor and press [**OK**] to complete registration of the audio engine.

apt-X Encoder Registration (Optional Product)

If you have the apt-X encoder software installed with a product, you must register this software module separately. The encoder software is machine-specific. This software can only be registered *after* it is installed on the PC.

When first installed and not yet registered, the apt-X encoder normally will pop up a trial run dialog when the host application is run. However, when the encoding software is being used by a *Windows service application*, you will not see the registration dialog because service applications and their display windows are hidden from the desktop.

In order to view the apt-X registration dialog, retrieve the needed information to register the software and, when you have received the registration, complete the registration process, you need to use a utility application supplied with XStudio Voice Tracker.

Soft apt-X™ Registration Step-by-Step (Service Application)

1. Launch the apt-X License Dialog Display Utility. A menu item is usually created to access this utility. Depending on the installation, it can be found in the Programs (or All Programs) menu under either **XStudio Voice Tracker | apt-X Registration Utility** or **dcsTools | Audio Engine | apt-X Registration Utility**. If you cannot locate a menu item, use Windows Explorer to find the file **aptX_RegDlg.exe**, which will be located in the folder where the software was installed.

   When started, the utility's main display appears, similar to the example shown.
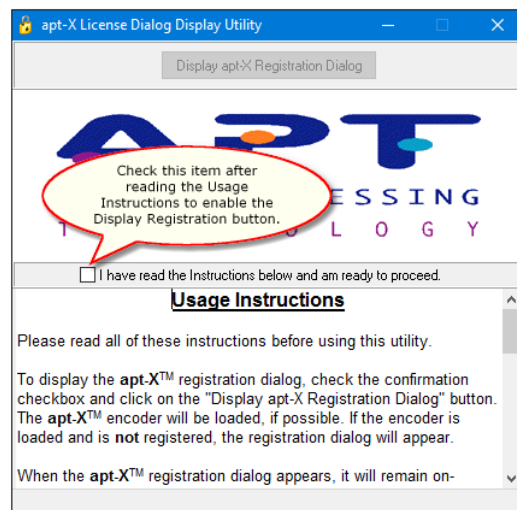
2. Read the on-screen instructions and click on the check box confirming that you have read the instructions are ready to continue. The [**Display apt-X Registration Dialog**] button will be enabled.

3. Click on the [**Display apt-X Registration Dialog**] button to display the apt-X registration

dialog, which will appear similar to the example shown. If the apt-X registration dialog not appear, refer to the section on *apt-X Registration Troubleshooting* below.
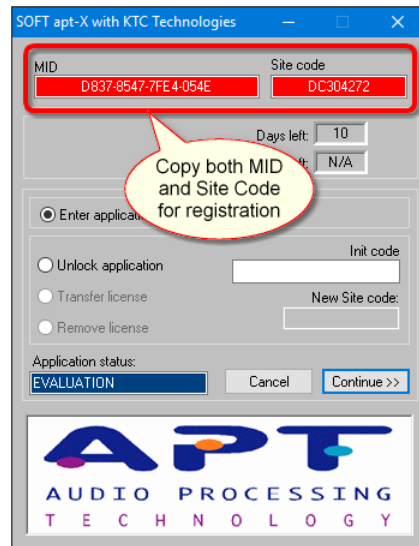
Hint	The apt-X registration dialog normally closes after several seconds if no action is taken by the user. To keep the dialog from closing while you copy down the needed information, select the "**Unlock Application**" radio button, which prevents the dialog from closing.

4. Select the "**Unlock Application**" radio button when the apt-X registration dialog is displayed. This stops the dialog from disappearing after a few seconds, giving you the time to write down both the **MID Code** and the **Site Code**, which appear across the top of the display. You can use a mouse to select and copy each of the two codes to the Windows clipboard, if you wish, to avoid handwriting the information.

5. When you have written down both codes, select the "**Enter Application**" radio button and click on the [**Continue**] button, which closes the apt-X registration dialog.

6. Close the apt-X License Dialog Display Utility.

7. E-mail the Mid Code and Site Code information you've written down to your supplier, or alternatively, use our on-line product-specific contact form. To better identify your request, write "**Soft apt-X Registration**" in the Subject line of your e-mail.

8. You will receive by return e-mail the necessary **Init Code** to register the apt-X software. You will also receive a **Remove Code**, which may be needed at a later time. Be sure to keep both of these codes for future use.

9. When you receive the **Init Code**, launch the apt-X License Dialog Display Utility. Click on the check box confirming that you have read the instructions are ready to continue. The [**Display apt-X Registration Dialog**] button will be enabled. Click on the [**Display apt-X**

Registration Dialog] button to display the apt-X registration dialog. Select the "**Unlock Application**" radio button and enter the **Init Code** you received. Click on the [**Continue**] button. The registration information is recorded and the apt-X software is now registered.

> ⚠️ If you decide to move the software that uses apt-X and the apt-X encoder software to another machine or substantial changes occur on the PC running with the apt-X software, the apt-X registration will have to transferred or updated. In order to do so, you will need the **Remove Code**. Be sure you have saved both the **Init Code** and the **Remove Code** in a safe place!

apt-X Registration Troubleshooting (Service Application)

When the apt-X encoding software is being used by a ***Windows service application***, normal display of the apt-X registration dialog is not possible, so a utility application is used to display the dialog.

The most common problem is that the apt-X registration dialog does not display when you click on the [**Display apt-X Registration Dialog**] button of the apt-X License Dialog Display Utility.

Check the status bar of the apt-X License Dialog Display Utility. It will tell you whether or not the apt-X module was successfully loaded.
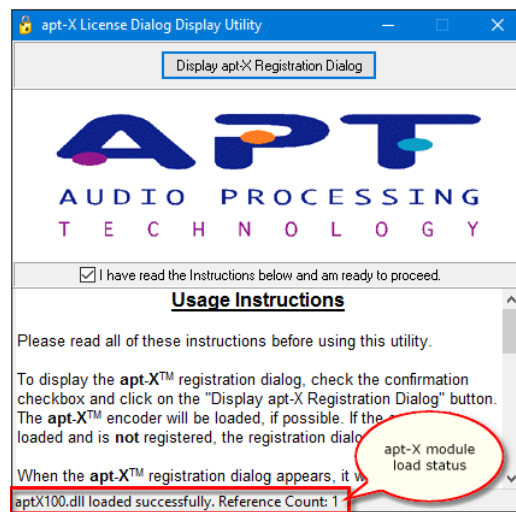
If the status bar indicates the apt-X module was not loaded, then either the module is missing altogether or the module is not in the system path. Search your hard disk for the file **aptx100.dll** to see if it exists.

If the status bar indicates the apt-X module was successfully loaded, but the apt-X registration dialog does not display, then the problem is likely to be that the software is already licensed. When the apt-X module is already registered, the registration dialog does

not display.

8.2   List of Files

When XStudio Voice Tracker is installed, a number of files are placed on your computer. As XStudio Voice Tracker is used, other files are generated, as outlined here.

> **AppDir** is the drive and folder location where you installed XStudio Voice Tracker (default: c:\dcsTools\XStudio Voice Tracker). **EngineDir** is the drive and folder location where the audio engine service was installed (default: c:\dcsTools\AudioEngine).

File	Location	Usage
_xsVtkr_Default_Log_Display_Colors.lcf	*AppDir*	A file containing the default color combinations used for non-audio log item display. This file can be imported to restore default settings. See the User Interface Settings section on Importing & Exporting Font and Color Information.
_xsVtkr_Sample_Cart_Masks.ccf	*AppDir*	A sample file containing cart masks and color combinations. Can be used as a basis for creating your own Cart Categories.
_xsVtkr_Sample_Log_Display_Colors.lcf	*AppDir*	A sample file containing an alternate color combination set for non-audio log item display. See the User Interface Settings section on Importing & Exporting Font and Color Information.
yyyymmdd_xsVtkr_EventLog.txt	*AppDir*	Daily event logs for the main application. Contains troubleshooting information.
aeRemote.dll	*AppDir*	Audio engine communications module.
AERemote.dmp	*AppDir*	Event log for the audio engine communications module.

File	Location	Usage
		Contains troubleshooting information.
GenCodec.dll	*AppDir*	Support file for aeRemote.dll.
MusicMaster_CCC_MS2ASC.xml	*AppDir*	Music export template for the Windows version of MusicMaster. Maestro-compatible.
MusicMaster_XStudio.xml	*AppDir*	Music export template for Windows version of MusicMaster. XStudio-compatible.
xsVtkr.chm	*AppDir*	The main help file. Beginning with version 1.1.0 of XStudio Voice Tracker, the original WinHelp files (xsVtkr.hlp, xsVtkr.cnt) were replaced by this help file.
xsVtkr.exe	*AppDir*	The main program file.
xsVtkr.ini	*AppDir*	Application settings file. Contains registration information, user settings, station definitions, cart mask definitions.
xsVtkrBarSettings.dat	*AppDir*	Current toolbar settings file – updated on application exit.
xsVtkrDefaultBarSettings.dat	*AppDir*	Settings file containing factory-default toolbar settings.
xsVtkrDefaultDockSettings.dat	*AppDir*	Settings file containing factory-default dock panel settings.
xsVtkrDefaultLogSettings.dat	*AppDir*	Settings file containing factory-default log display settings.
xsVtkrDockSettings.dat	*AppDir*	Current dock panel settings file – updated on application exit.

File	Location	Usage
xsVtkrLogSettings.dat	*AppDir*	Current log display settings file – updated on application exit.

Audio Engine Service

File	Location	Usage
aptX_RegDlg.exe	*EngineDir*	Utility application used to display the apt-X encoding software registration dialog.
Aptx100.dll	*EngineDir*	**Optional** apt-X encoding module component.
asihpi32.dll	*EngineDir*	Audio engine support file.
AudioEngine.DMP	*EngineDir*	Event log for the audio engine service. Contains troubleshooting information.
AudioEngine.exe	*EngineDir*	The audio engine service main program file.
crSetSvcAccess.exe	*EngineDir*	Utility application used to set user access privileges for the audio engine service.
GenCodec.dll	*EngineDir*	Audio engine support file.
NCTAudioCompress.dll	*EngineDir*	Audio engine support file.
Pcgw32.dll	*EngineDir*	**Optional** apt-X encoding module component.

Deprecated Files (No Longer Used)

File	Location	Usage
gdiPlus.dll	*AppDir*	Graphics display interface module, installed on Windows 2000 only.
RoboEx32.dll	Windows\System	Support file for original help system.
xsVtkr.hlp	*AppDir*	Original Windows help file.
xsVtkr.cnt	*AppDir*	Original Windows help table of contents file.
xsVtkr_EventLog.txt	*AppDir*	Original event log for the main application. Contains

File	**Location**	**Usage**
		troubleshooting information.

Use of the file ***RoboEx32.dll*** and original help files were discontinued, starting with version 1.1.0 of XStudio Voice Tracker, when on-line help was transitioned from traditional Windows help (.HLP) to compiled HTML (.CHM) help. If you updated with the XStudio Voice Tracker installer, these files were removed as a part of the old version uninstall.

8.3 Revision History

This topic contains historical information on changes, enhancements and corrections to XStudio Voice Tracker by version number and date. For the most recent changes and enhancements, see the What's New topic.

Version 1.5.2.160 - 01/11/2018

1. **Enhancement**. Users can now optionally have voice track recordings auto-start on first detected audio rather than the recording starting immediately at Aux Mark in an auto-track sequence. This feature can be used to avoid any "dead air" at the beginning of the voice track, thus tightening up the playback sequence in cases where, for instance, a song ends cold. When enabled, manual recordings also start at detection of first audio. The audio threshold for starting the recording is set using the **Record Auto-Start Threshold** property in Preferences.

2. **Enhancement**. Song intro times are automatically updated when refreshing information from the music data.

3. **Change**. XStudio Voice Tracker now checks to ensure that the just-recorded voice actually has audio in the file. If the voice track has no audio data blocks, the user is advised to re-do the recording and the voice track cart is not committed, either automatically or manually by the user.

4. **Change**. The Aux Mark LED has been enlarged to provide a more obvious cue when auto-tracking.

5. **Fix**. Certain non-standard data in an exported music data file would cause an AV when being imported. XStudio Voice Tracker now detects and works around these unexpected values.

6. **Fix**. XStudio Voice Tracker would erroneously copy a completed voice track to the root directory of the drive on which is was running if a station's voice track transfer audio path was empty. No file copy should have occurred if no transfer audio path was defined.

Version 1.5.0.145 - 07/13/2016

1. **Enhancement**. A floating clock display has been added. The clock is configurable for size, location and color scheme. See the topic Using the Clock for additional information.

2. **Enhancement**. Importing of music data has be revised to include more information. Depending on the music scheduling system you are exporting your library from, XStudio Voice Tracker now imports song run time (length), category, intro, ending, album, and release year. Note that some library exports do not include all of this new information and when not present in the source data, XStudio Voice Tracker will leave the affected field blank.

3. **Enhancement**. A new music export template for MusicMaster has been introduced. This template adds the fields Album and Year (typically Peak Year or Release Year) to the exported data. A sample template is included in the XStudio Voice Tracker installation. The template contents are documented in the Exporting MusicMaster topics. This new export structure can be constructed and used with other music scheduling systems as well. See the topic Generic dcsTools (XStudio) Export for more information.

4. **Enhancement**. Previously, if the audio engine was not running when XStudio Voice Tracker launched and XStudio Voice Tracker could not start the engine, the list of available audio devices for playback and recording would be empty until XStudio Voice Tracker was restarted. Now, if the audio engine is later started, XStudio Voice Tracker will update the device list, eliminating the need to restart XStudio Voice Tracker to populate the device lists.

5. **Enhancement**. XStudio Voice Tracker now detects Windows 10 and adjusts its display accordingly.

6. **Fix**. The Open Log dialog has been updated to ensure the "Busy" display doesn't disappear behind the main dialog when scanning for available log files.

Version 1.4.0.125 - 08/11/2014

1. **Enhancement**. Users can now define non-audio log element display colors. Individual text and background color combinations for Directives, Log Notes and Program Titles can be set in the new User Interface section of Preferences.

2. **Enhancement**. The XStudio Voice Tracker installation now includes a ready-made music export template for the Windows version of MusicMaster. See the topic on Exporting Data from your Music Scheduling System for more information.

3. **Enhancement**. The XStudio Voice Tracker manual, supplied in PDF format, has been optimized for duplex printing.

4. **Enhancement**. XStudio Voice Tracker now detects Windows 8, Windows 8.1, Windows Server 2012 and Windows Server 2012R2 operating systems and adjusts its display accordingly.

5. **Fix**. Under certain circumstances, XStudio Voice Tracker would not detect the audio engine running in console mode in Windows 7.

6. **Fix**. File dialogs in the Preferences area now display on the correct monitor in multi-monitor environments.

Version 1.3.0.115 - 02/20/2012

1. **Enhancement**. A new option in Preferences allows users to disable Auto-Commit of newly-recorded voice tracks. When disabled, the user is prompted to commit or discard the voice track. If discarded, the recording is deleted and no file copying occurs, if enabled.

2. **Enhancement**. When a voice track recording is completed and committed, XStudio Voice Tracker now updates the corresponding log item's displayed length and the hourly totals display is updated.

3. **Enhancement**. Copying of audio files to the transfer directory is now retried several times before notifying the user the copy has failed. If another program has locked a voice track file that is to be replaced, multiple attempts to copy the file increase the chance of success as the file may be released by the other program while XStudio Voice Tracker is retrying the copy operation.

4. **Enhancement**. In addition to the main display audio engine connection LED changing to red when disconnected, a message dialog is now displayed when XStudio Voice Tracker is unexpectedly disconnected from the audio engine. The message appears when the disconnect is detected and every minute or so thereafter until reconnected.

5. **Enhancement**. If XStudio Voice Tracker is unexpectedly disconnected from the audio engine, XStudio Voice Tracker will now attempt to reconnect, including restarting the audio engine service if stopped, at approximately 1-minute intervals. If the audio engine is running in console mode, no restart attempt is made.

6. **Enhancement**. An updated version of the audio engine is included in this release. It includes stability enhancements and support for Windows 7.

> ⚠️ **Audio Engine Prerequisites**
> Beginning with version 1.99.01.05, the audio engine and client dll require the ***Microsoft Visual C++ 2008 SP1 Redistributable Package (x86)*** be present on the host PC. To check whether or not it is installed, open Add/Remove Programs (or equivalent) in Control Panel. Look for the item "**Microsoft Visual C++ 2008 Redistributable - x86**" followed by a version number. The XStudio Voice Tracker installation program checks for this package and if not present, will install it as part of the overall installation process.

7. **Enhancement**. XStudio Voice Tracker is now aware of multiple monitor host systems and properly saves and restores its position on the correct monitor.

8. **Enhancement**. XStudio Voice Tracker now reports the host operating system in more detail and has been updated to reflect the release of Windows 7.

9. **Change**. A new installation program is now used that reduces the installer "footprint" and is simpler to use. When the new installation program is run and the previous XStudio Voice Tracker installer is detected, it is uninstalled (after user confirmation), removing files that are no longer needed.

10. **Change**. When closing XStudio Voice Tracker, users are now prompted to confirm they wish to close the program.

11. **Fix**. The main display could start up in a minimized state at program launch.

12. **Fix**. When multiple audio files were in an EOM state (between Aux Mark and end-of-file), the Aux LED was turning off prematurely when the first item's end-of-file was reached.

13. **Fix**. The bit rate for 44.1 PCM audio was displayed incorrectly in the cart edit dialog.

14. **Fix**. Corrected a problem with calculating the Length and Aux Mark values of large long-form PCM 44.1 stereo files. When the problem occurred, the length values would be displayed as negative numbers in the cart edit dialog.

Version 1.2.0.85 - 04/02/2009

1. **Enhancement**. XStudio Voice Tracker now displays .DAF file version v1.4 extended cart header information in the cart view/edit dialog. Information contained the the v1.4 header includes song title, artist, hook line information, intro and outro times and tag text.

2. **Enhancement**. Performance when retrieving large lists of stations has been improved.

3. **Enhancement**. Loading of malformed logs has been improved. Specifically, it has been observed that traffic logs produced by Wide Orbit occasionally contain invalid records, both under-sized and over-sized as a result of incorrect padding of the log record. The problem would be evident only if a user opened an original pre-merged traffic log.

4. **Enhancement**. The standard installation of XStudio Voice Tracker now prevents inadvertent "double-launch" of the application. Only one instance of XStudio Voice Tracker is allowed on each PC.

5. **Enhancement**. The Open Log dialog has been updated for better performance when building a list of available logs for a station and there are a large number of files in the station's log folder.

6. **Enhancement**. The XStudio Voice Tracker documentation has been reorganized to a more logical structure, along with a number of sample display updates.

7. **Change**. Users are no longer allowed to edit voice track cart properties if the cart is actively recording. In addition, checks are now made to ensure that if a voice track cart properties are edited by another application while a user has the cart properties dialog open and then the user tries to commit the changes, the user is warned and offered the choice of either continuing to commit the changes or to cancel the changes.

8. **Fix**. Corrected a problem that occasionally occurred in an auto-track sequence if a user stopped playback of an intro before stopping the recording. On the very next auto-track sequence, the outro would play but the voice track recording would not start.

9. **Fix**. Corrected a problem with the Station Info panel where the font size for the displayed text would occasionally be too large, causing the displayed station name and call letters to not fit completely within the panel.

10. **Fix**. If the host PC has more than 2GB RAM installed, the reported amount of available RAM was incorrect. On PC's running Windows 2000, XP and Vista, the correct amount of RAM is now displayed.

Version 1.1.2.78 - 04/08/2008

1. **Change**. Playback of multi-cut carts has been modified. Previously, if the next-to-play cut did not exist, only the first item in the cart rotation list was checked and played if it existed. Now, if the next-cut-to-play file does not exist, the entire rotation list is checked until a cut is found that does exist. If none of the cuts in the rotation list exist, an error message is displayed.

2. **Fix**. During an auto-track sequence, if a recording was active and a user attempted to stop playback with no rehearsal audio playing, the next auto-track sequence would not start properly. This has been corrected.

Version 1.1.1.76 - 07/03/2007

1. **Change**. The "**!**" (exclamation) character has been added to the list of acceptable characters to use in defining cart masks. While DCS and Maestro documentation indicated the exclamation was an invalid character to use, it has not been enforced and users have created carts using this character.

2. **Fix**. A updated version of the audio engine service is supplied with this version of XStudio Voice Tracker. It corrects a very occasional problem with "digital noise" appearing at the very beginning of a recorded voice track. Only PCM and apt-X encoded audio were affected. The updated engine is Version 1.90 (Build 20070630 - 17:48).

3. **Fix**. If a voice track cart was saved as a .dff file to an active ACP server and the user tried to edit the voice track cart, the cart was reported as missing. This occurs because the ACP server has already imported the cart into the inventory, in the process renaming it to a .daf file. Now, if the .dff is missing, an attempt is made to load and edit its corresponding .daf file. When edited, the cart is saved as a .dff, enabling an ACP server to re-import the revised audio cart.

> ⚠️ In the situation where voice track carts are targeted to an ACP server as .dff files, copying the file to a Voice Track Xfr Audio Path (if defined) will generally fail because the source .dff file is handled by the ACP server before the copy process can begin. If you are targeting voice track carts directly to an ACP server, the Voice Track Xfr Audio Path should be left empty.

Version 1.1.0.75 - 03/22/2007

1. **Enhancement**. An intro count-down timer has been added. Display of the timer is optional and is enabled by selecting the menu item **View**. Check the item **Intro Timer**.

The timer gets its value from the log, if available, and is active when playing an intro or during normal playback. The timer panel can be moved, re-sized and floated to accommodate your preferred placement and size. See the topic on Using the Intro Timer for additional information.

2. **Enhancement**. Users can now select a "default station". The default station's logs are displayed when the Open Log dialog is first used. If no default station is selected, the previous behavior of displaying the last station used logs is retained. To set a default station, select the menu item **Preferences | Stations** and navigate to the station you wish to make the "default station". With that station displayed, click on the [**Set Default Station**] button. A message will appear, confirming your selection.

3. **Enhancement**. A station information panel has been added. The information includes the user-friendly station name and the station Call Letters. Display of the panel is optional and is enabled by selecting the menu item **View**. Check the item **Station Info**. As a default, the panel is located immediately above log. The panel can be moved, re-sized and floated to accommodate your preferred placement and size.

4. **Change**. The help documentation has been modified to work with Windows Vista. Vista does not support the traditional help file (*.HLP). The help documentation is now supplied as a compiled HTML file (*.CHM).

> Microsoft Security Update 896358 not only fixes a vulnerability in HTML Help, it prevents HTML Help files from execution if the CHM file is installed on a network drive. CHM files installed locally continue to work.
>
> **Symptoms**: When you open a CHM file from a UNC path or from a network drive even if the network drive is mapped to a drive letter, the HTML Help viewer opens and instead of displaying the topic, it displays an error message "Action canceled" in the topic pane.
>
> **Solutions**: Install the application on a local drive to avoid this problem. Alternatively, there are some registry changes that can be made manually to re-enable using CHM help files from a network drive. A free HTML Help Registration Utility is available at the EC Software web site.

5. **Fix**. The creation of the initial station in Preferences | Stations has been modified to eliminate rare conditions where mouse movement automatically activated any station field it was floated over.

6. **Fix**. If a user manually edited a voice track cart's properties, the changes were not being copied to the Voice Track Xfr Audio Path, if one was defined. XStudio Voice Tracker now detects these changes and copies the updated voice track file as needed.

7. **Fix**. A user could define an invalid default owner node number when setting up a station. The spin control allowed the user to set negative values. Now, if a negative value is detected, the owner node number is automatically set to zero, which is the default owner node.

Version 1.0.1.73 - 10/14/2006

1. **Enhancement**. The audio file properties dialog has been revised for a more consistent appearance as application styles are changed.

2. **Enhancement**. Handling of multi-cut cart playback has been improved. If the flagged Next-To-Play cut is not available, an attempt is made to play the first element in the rotation sequence.

3. **Enhancement**. A menu item under **Log Settings** has been added to enable copying the Log Description field to the Song Title field as applicable. This enables the user to hide the Log Description field, if desired, and still be able to see the non-music cart descriptions on the log.

Version 1.0.0.72 – 06/13/2006

1. Initial commercial release of XStudio Voice Tracker.

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