



OpX One Installation and Configuration Guide

FastFind Links

Product Overview

Installing the OpX One Software

Audio Server Module

Auxiliary Audio Server Module

Data Repeater Module

Mobile Gateway/Client Module

Import-Merge Module

Info Editor Module

File Server Module

FTP Server Module

Studio Client Module

File Manager Module

Clock Builder Module

Audio Server Watchdog Module

Troubleshooting

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Introduction

This reference manual describes how to install and configure the OpX One broadcast-automation system from Broadcast Software International (BSI). OpX One has been designed from the ground up to deliver superior performance in single station environment. OpX One offers an intuitive on-air environment, with full touch-screen capability, simple yet powerful voicetracking, and an easy-to-use production interface.

Before using this manual, familiarize yourself with the Table of Contents on page 3. All first-time users should read Chapter 1. A glossary of terms appears in Appendix C - Glossary and troubleshooting suggestions are in Chapter 15.

Audience

This guide is intended for the person who installs, uses, and maintains the OpX One software. This document assumes the reader has moderate hardware, computer, and networking skills.

Document Revision Level

This section provides a history of the revision changes to this document.

| Revision | Document Version | Date | Description |
|----------|------------------|-----------------|-----------------|
| A | Version 1 | March, 13, 2018 | Initial release |

Changes in this Revision




- Initial version

Document Conventions

This guide uses the following conventions to draw your attention to certain information.

Safety and Warnings

This guide uses the following symbols to draw your attention to certain information.

| Symbol | Meaning | Description |
|---|---------|---|
|  | Note | Notes emphasize or supplement important points of the main text. |
|  | Tip | Tips provide helpful information, guidelines, or suggestions for performing tasks more effectively. |
|  | Warning | Warnings indicate that failure to take a specified action could result in damage to the device, or could result in serious bodily injury. |

Typographic Conventions

This guide also uses the following typographic conventions.

| Convention | Description |
|--------------------------|---|
| Bold | Indicates text on a window, other than the window title, including menus, menu options, buttons, fields, and labels. |
| <i>Italic</i> | Indicates a variable, which is a placeholder for actual text provided by the user or system. Angled brackets (< >) are also used to indicate variables. |
| <code>screen/code</code> | Indicates text that is displayed on screen or entered by the user. |
| > bracket | Indicates a shortcut for selecting menu options. For example, Edit > Settings means to select the Settings option from the Edit menu. |
| < > angled brackets | Indicates a variable, which is a placeholder for actual text provided by the user or system. Italic font is also used to indicate variables. |
| [] square brackets | Indicates optional values. |
| { } braces | Indicates required or expected values. |
| vertical bar | Indicates that you have a choice between two or more options or arguments. |

1 Product Overview

Topics:

- ⤴ *OpX One Modules (page 13)*
- ⤴
- ⤴
- ⤴ *Matching User Tasks with Modules (page 14)*

This chapter provides an overview of the OpX One broadcast-automation system.

1.1 OpX One Modules

OpX One is composed of separate modules. Each module can run on the same computer for single-station installations, or they can run on separate computers for redundancy and multi-station cluster setups.

Table 1-1 describes the OpX One modules. For more information about a module, go to the page in the “See Page” column.

Table 1-1. OpX One Modules

| Module | Description | See Page |
|------------------------|--|---|
| File Server | Tracks your audio files, their locations and attributes, stations to which they belong, and data transfer between OpX One Audio Servers and OpX One Studio Clients. | 33 |
| Audio Server | Plays logs, executes macros, and performs record functions. | 49 |
| Auxiliary Audio Server | Same as the main audio server, except that a studio client cannot connect to it. This module can do background recording, as well as run a full station. | 122 |
| Studio Client | Controls the audio server logs, plays back Hot Keys and used in voicetracking. | 124 |
| File Manager | Performs all Info Editor functions, with the added ability to transfer files. | 174 |
| Clock Builder | Creates clock templates. | 204 |
| Import-Merge | Imports program logs from traffic- and music log-generating software, and merges them into a single log along with clocks generated by the Clock Builder module. | 247 |
| Info Editor | Creates and modifies audio file tags. Also, sets intro and segue points of cuts. | 279 |
| File Sync | Transfers files between the file server and clients. | Error! Bookmark not defined. |
| FTP Server | Transfers files to audio servers. | 292 |
| Data Repeater | Takes the PAD data output from the audio server, reformats the output if necessary, and sends it to multiple destinations, such as RDS or stream encoders. | 301 |
| Mobile Gateway/Client | Used for IOS remote operation. <ul style="list-style-type: none"> • The gateway runs on the OpX One network and allows access from the IOS device. • The client is the software that runs on the IOS device. | 314 |
| AS Watchdog | Monitors the audio server process and restarts the Audio Server module if the module becomes nonresponsive. | 322 |

1.2 Matching User Tasks with Modules

The information in this guide is designed so that you can begin using OpX One modules in the shortest possible time, without having to read the entire guide. In fact, you might not have to read some chapters and appendixes, except out of curiosity. To find out which chapters and appendixes you need to read, identify the type of reader you are in

Table 1-2.

Table 1-2. Matching Readers with Modules

| Chapter | User Type | | | | | |
|----------|--------------------|------------------------|------------------|----------|-------------------|--------------------|
| | On-Air Personality | Satellite Program User | Program Director | Engineer | Traffic Personnel | Support Technician |
| 2 | | | | • | | • |
| 3 | | | | • | | • |
| 4 | | • | • | • | | • |
| 5 | | • | • | • | | • |
| 6 | • | • | • | • | | |
| 7 | | | • | • | • | • |
| 8 | | • | • | • | • | • |
| 9 | | • | • | • | • | • |
| 10 | | | • | • | • | |
| 11 | | | • | • | | • |
| 12 | | | | • | | • |
| 13 | | | | • | | • |
| 14 | | | | • | | • |
| 15 | | | | • | | • |
| 16 | | • | • | • | | • |
| Appendix | On-Air Personality | Satellite Program User | Program Director | Engineer | Traffic Personnel | Support Technician |
| A | | | | • | | • |
| B | • | | | • | | |
| C | | | | • | | • |
| D | • | • | • | • | | • |

2 Installing the OpX One Software

Topics:

- ⤴ *Installation Configuration*
(page 16)
- ⤴ *System Requirements*
(page 18)
- ⤴ *Installation Instructions*
(page 19)
- ⤴ *Installing the USB*
Registration Key (page 25)
- ⤴ *Registering Your OpX*
One System (page 31)
- ⤴ **Error! Reference source**
not found. (page **Error!**
Bookmark not defined.)
- ⤴ *Where to Go from Here*
(page 32)

This chapter describes how to install the OpX One software.

2.1 Installation Configuration

OpX One supports a single, all-in-one installation configuration. OpX One is designed to run on a single workstation for on-air playout purposes (see Figure 2-1 for an example) for a single station. Secondary production workstations can also be added (see Figure 2-2 for an example) for log import, voice tracking, and adding audio files to the OpX One system.

OpX One is the stand-alone, single station version of the OpX automation system family. For multi-station and redundant installations, take a look at OpX at www.bsiusa.com.

2.1.1 On-Air Workstation

Figure 2-1 shows the main OpX One installation configuration, where all modules are installed and run from a single machine. All audio play-out derives from this workstation.



Figure 2-1. OpX One all-in-One Configuration

2.1.2 Production Workstation

An OpX One production workstation is a workstation with the Studio Client module installed along with the utility modules: Clock Builder, Import-Merge, and File Manager. The production workstation will access all the same audio and program logs as the on-air workstation. OpX One production workstations can be added to your network, so you can import logs and voice track independently of the on-air workstation.

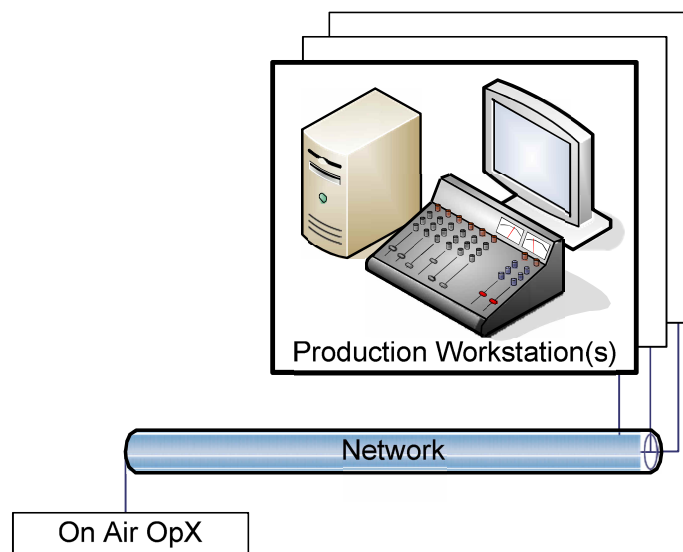


Figure 2-2. Production Workstation Configuration

2.2 System Requirements

OpX One was designed and tested with the specifications in Table 2-1. Using hardware that has not been tested and certified by BSI can cause issues that can be avoided by using the following specifications.

Table 2-1. System Requirements

| Specification | Description |
|------------------|---|
| Processor | Intel Xeon i5 or i7 |
| RAM | 4 GB |
| File server | File server with hard drive for operating system and applications, with one or more separate hard drives for audio files. For clients/audio servers, use RAID 1. For file server, use RAID 10. |
| Operating system | <ul style="list-style-type: none"> • Microsoft Windows 7 • Microsoft Windows 10 • Microsoft Windows Server 2008 • Microsoft Windows Server 2012 |
| Network | Two Gigabit Ethernet network-interface cards (NICs) and switches |
| Audio cards | AudioScience 5xxx and 6xxx series PCI and PCIe audio cards, including: <ul style="list-style-type: none"> • Digital and analog audio cards • Livewire cards • AXIA or WheatStone AoIP drivers |
| Broadcast tools | <ul style="list-style-type: none"> • SS8.2 – 8-channel audio switcher/16 channel GPIO • SS16.4 – 16-channel audio switcher/24 channel GPIO • ACS 8.2 – 8-channel audio switcher/16 channel GPIO • GPI-32 – 32-channel GPI • SRC 8-III – 8-channel GPIO • SRC 16 – 16-channel GPIO |
| Miscellaneous | <ul style="list-style-type: none"> • Telos Axia audio drivers: <ul style="list-style-type: none"> – Analog and digital audio nodes GPIO nodes – Element control surfaces • Audio nodes • Control surfaces • GPIO nodes |
| Audio files | <ul style="list-style-type: none"> • All audio files must have the same sample rate: 44.1 kHz, 32 kHz, or 22.05 kHz. If you have audio files with differing sample rates, convert the files to a single sample rate. Tools such as Adobe Audition have a batch-convert function to convert the sample rate for multiple audio files. • You can mix mono and stereo audio files, as long as they are the same sample rate. • OpX One supports PCM wave 16-bit, MPEG 1 layer 2 (AKA MPEG 2), and mp3 audio files as long as: <ul style="list-style-type: none"> – A suitable Windows ACM codec is installed for compressed format audio files, and – The extension of each audio file is .wav (for example, "my audio file.wav"), even if the audio file is formatted as an mpeg 2 or mp3 internally. |

2.3 Installation Instructions

This section provides instructions for installing the OpX One software.

Before you install the OpX One software:

- Identify at least one static IP addresses that are available for use: one for the main on-air OpX One PC, and one for each OpX One production PC. These are long-term IP addresses that must remain static during the entire time you use OpX One, and they must be on a single subnet. The installation uses this information in the configuration files and shortcuts.



Tip: If you want to add modules to an OpX One workstation at a later time, run the installer again and add just the modules you want. If you accidentally add a module that is already installed, do not worry. The installer will not overwrite your configuration and preferences for existing modules.

➤ To install the OpX One software

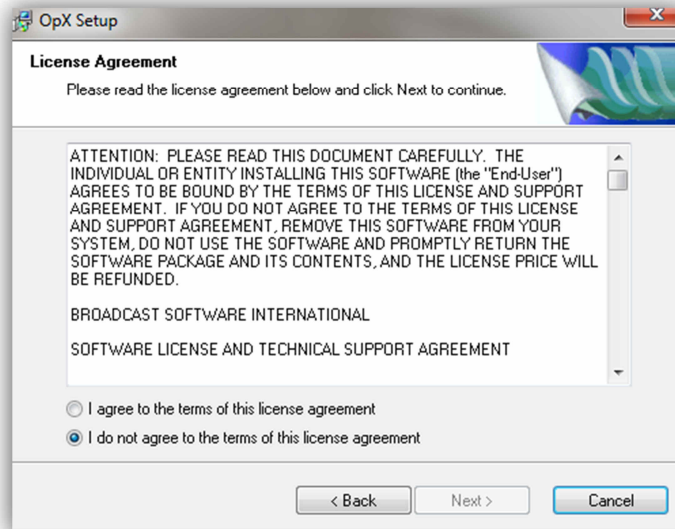
1. Exit all Windows programs.
2. Obtain the `OpX_One_Setup.exe` executable file and double-click it.

The Welcome screen appears.



3. Click **Next**.

The license agreement appears.



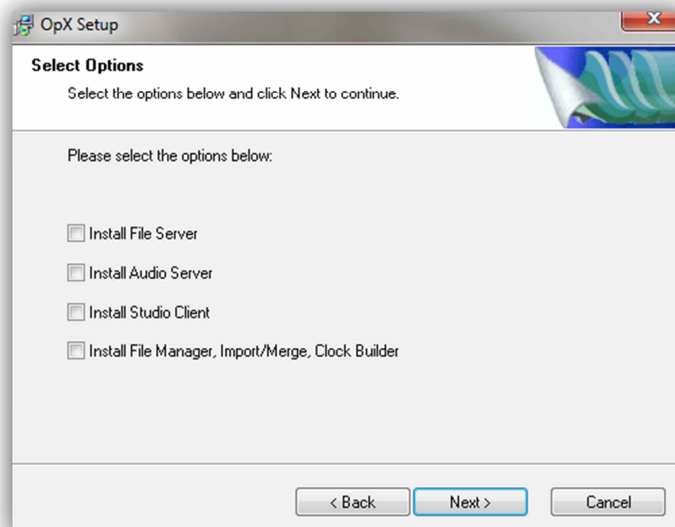
4. Read the license agreement, and then click **I agree to the terms of this license agreement**.



Note: You must agree to the terms to proceed with the installation.

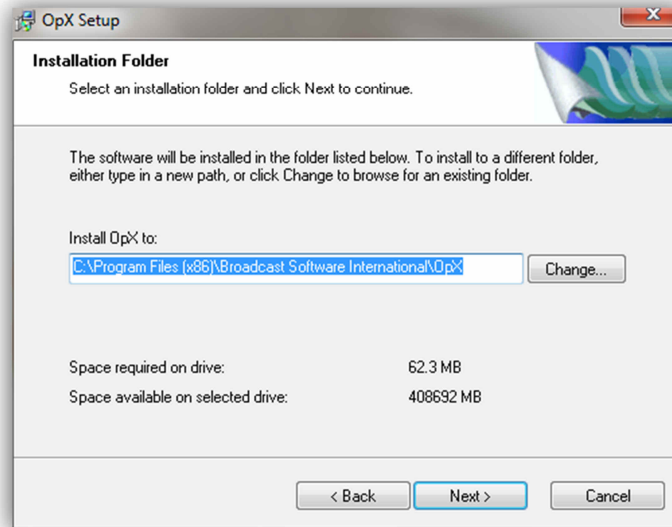
5. Click **Next**.

You are prompted to select the options you want to install on this computer.



6. Check the options you want to install on this computer. Click **Next**.

You are prompted for a folder where the selected options will be installed.



7. Accept the default location shown, or enter a different location or click the **Change** button and select the location where you want to install the OpX One options.

The bottom of the page shows the amount of space required to install the selected options and the amount of space available on the selected drive.

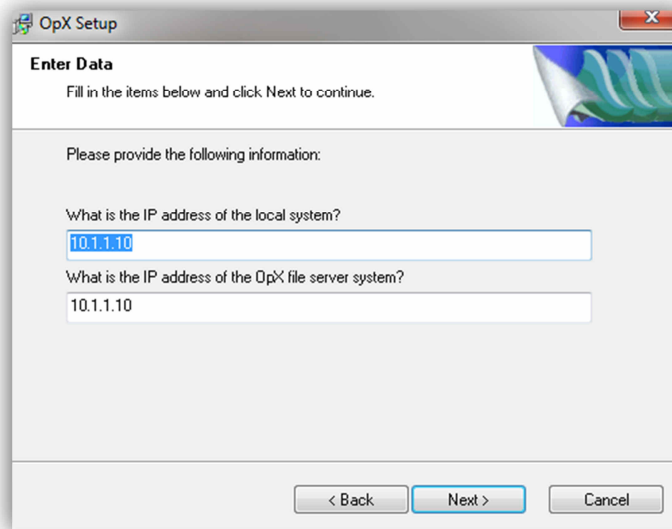
8. Click **Next**.

You are prompted for IP addresses of the local system and the OpX One file server system.



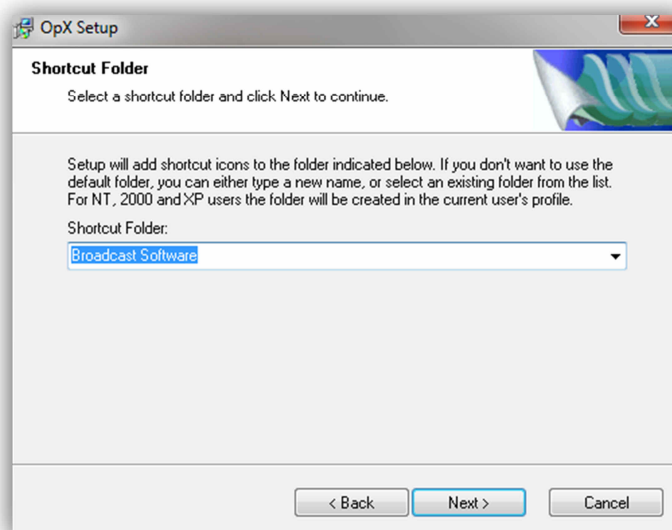
Note: If you need to change the IP address of the OpX One file server system, use **Edit > Settings** in the OpX One File Server module (see section 3.3).

Installing the OpX One Software



9. Enter the IP addresses in their respective fields, and then click **Next**.

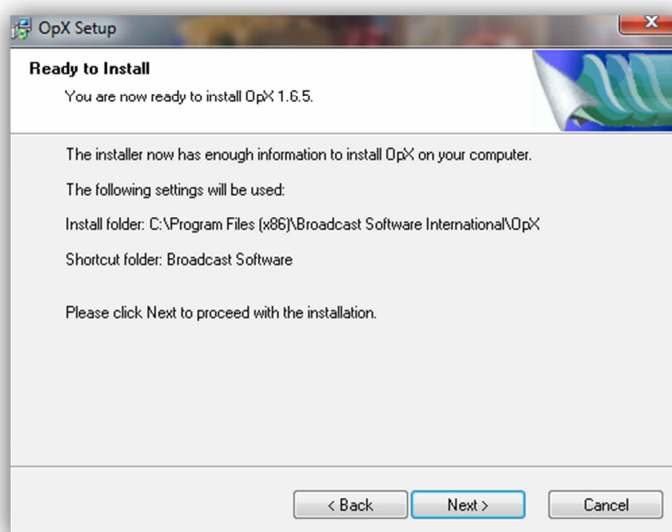
You are prompted to select a shortcut folder.



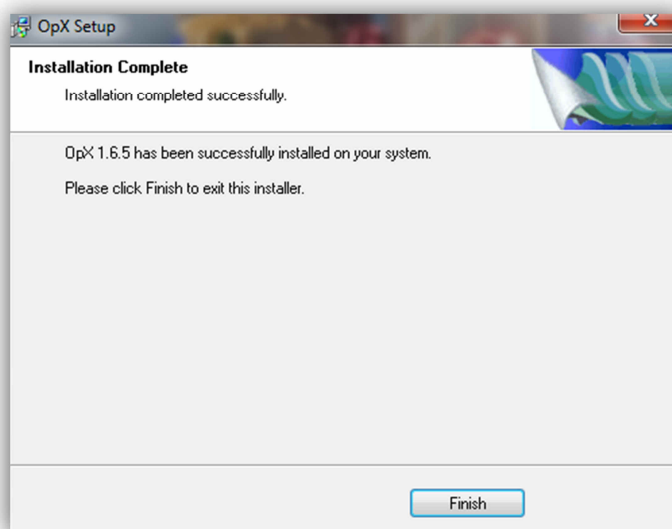
10. Accept the default folder shown or select a different folder, and then click **Next**.

The Ready to Install screen tells you that there is enough information to install OpX One on your computer.

Installing the OpX One Software

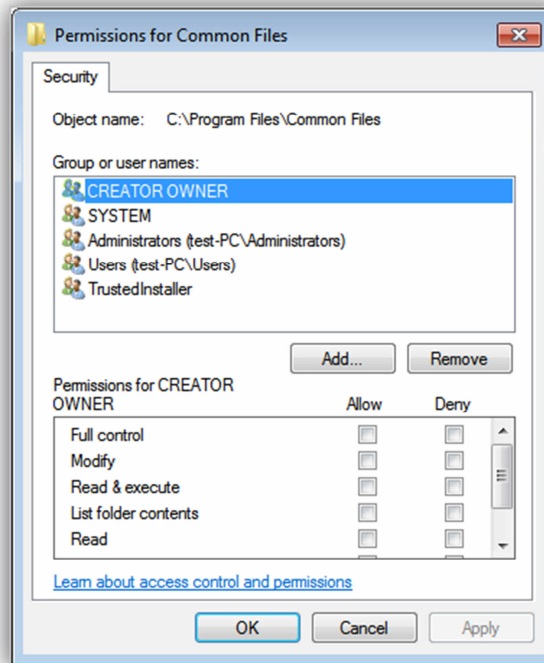


11. To review or change your settings, click **Back** until you reach the appropriate screen, make the required changes, and then click **Next** until the screen above appears.
12. Click **Next** to install OpX One using the settings you specified. The OpX One software is installed and the Installation Complete screen appears.



13. Click **Finish** to close the screen.
14. Change the permissions of the BSI folder in %PROGRAMFILES% so that everyone can modify the folder. Otherwise, the system places user data in %PROGRAMDATA% instead of %PROGRAMFILES%. For Microsoft Windows systems:
 - a. Right-click the BSI folder, click **Properties**.

- b. Click the **Security** tab, and then click the **Edit** button.



- c. Click the **Add** button.
- d. At the Select Users or Groups dialog box, type **Everyone** in the **Enter the object names to select** field.
- e. Click **Check Names**.
- f. At the Permissions for VNC Shortcuts dialog box, click **Everyone** in the **Security** tab, check **Modify** in the **Allow** column, and click **OK**.
15. Proceed to the next section to register your OpX One system.

2.4 Installing the USB Registration Key

After you install the OpX One software, you install the USB registration key. Registration is performed using a hardware registration key on the supplied Universal Serial Bus (USB) memory (data) stick.

The hardware key requires a software driver called the Sentinel Protection Windows driver in order for the File Server to access the hardware. The driver can be provided on a BSI installation CD (see section 2.4.1) or downloaded from the Drivers page on the BSI website (see section 2.4.2). Always ensure that you have the latest BSI-tested driver when purchasing a new product.



Note: Install the driver and USB registration key and driver on your File Server workstation only. Other BSI products may require their own hardware key. Only one hardware key can be installed per workstation. If you received multiple registration keys for BSI products you intend to run on a single machine, contact BSI Sales.



Warning: Do not insert the registration key into a USB port on your file server until the Windows software driver is installed using the following procedure.

2.4.1 Installing the driver from the BSI Installation CD

The following procedure describes how to install the Sentinel Protection Windows driver from a BSI Installation CD. If you downloaded the driver from the BSI website, use the drive-installation instructions in section 2.4.2 instead.

➤ To install the driver from the BSI Installation CD

1. Insert the supplied CD into your computer's CD-ROM or DVD-ROM drive.

*The BSI utility launches automatically. In the unlikely event that the BSI utility does not launch, use Windows Explorer to browse to your computer's CD-ROM or DVD-ROM drive and double-click the **Install.exe** file on the CD. The application selection window appears.*



2. Using the **Application** drop-down list, click **Sentinel Protection Installer – for BSI Dongle**. This is the first option from the drop-down list.
3. Click **Install**.
4. Proceed to section 2.4.3 to install the Sentinel Protection Windows driver.

2.4.2 Downloading the Driver from the BSI Website

The following procedure describes how to install the Sentinel Protection Windows driver from a BSI Installation CD. To install the driver from CD, use the drive-installation instructions in section 2.4.1 instead.

1. Launch a web browser and go to the BSI Drivers page at <http://www.bsiusa.com>.
2. Download the driver into a new folder.
3. After downloading the driver, extract the files into the new folder.
4. Double-click the .exe file that was extracted in the previous step.
5. Proceed to section 2.4.3 to install the Sentinel Protection Windows driver.

2.4.3 Installing the Sentinel Protection Windows Driver

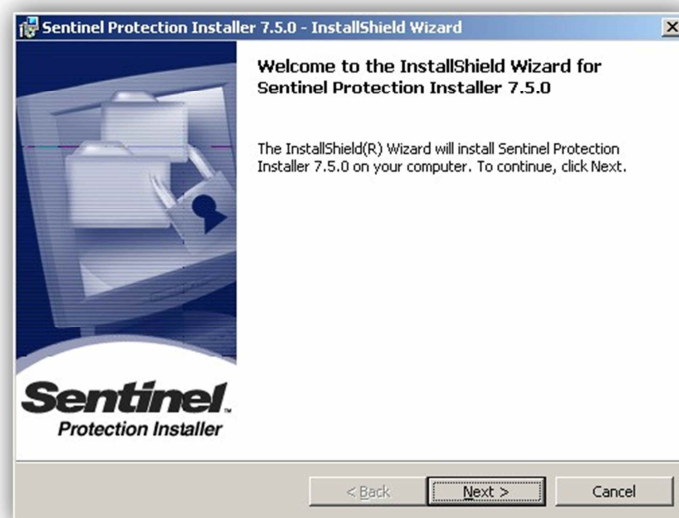
After starting the Sentinel Protection Installer from the BSI Installation CD or by downloading from the internet, use the following procedure to complete the installation.

➤ **To install the Sentinel Protection Windows driver**

1. If the following security warning appears, click the **Run** button.



2. At the next screen, click **Next**.

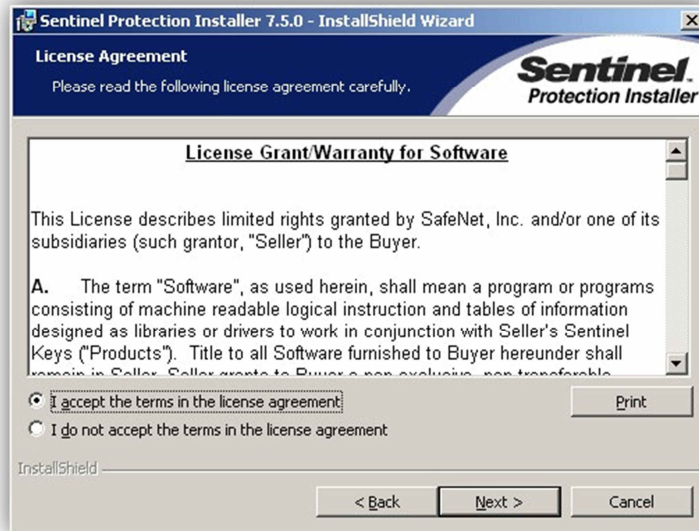


3. When the License Agreement page appears, read the Software License Agreement. If you agree to its terms, click the **I accept** radio button, and then click **Next**.

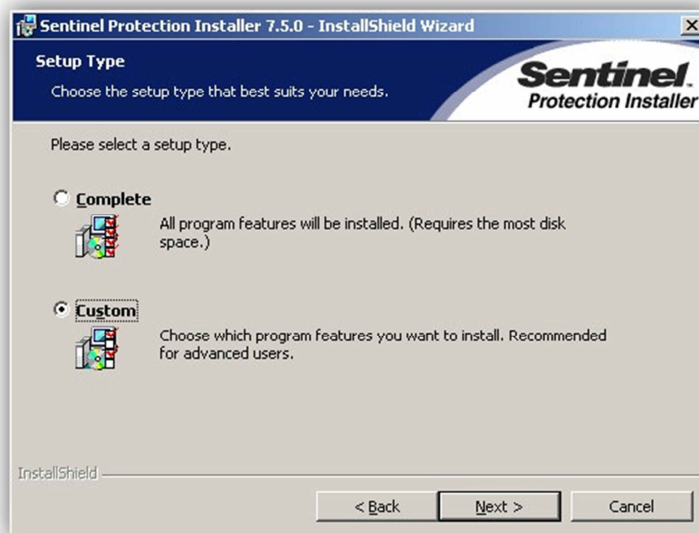


Note: You must agree to the terms to continue with the installation.

Installing the OpX One Software



4. At the Setup Type page, click **Custom**, and then click **Next**.



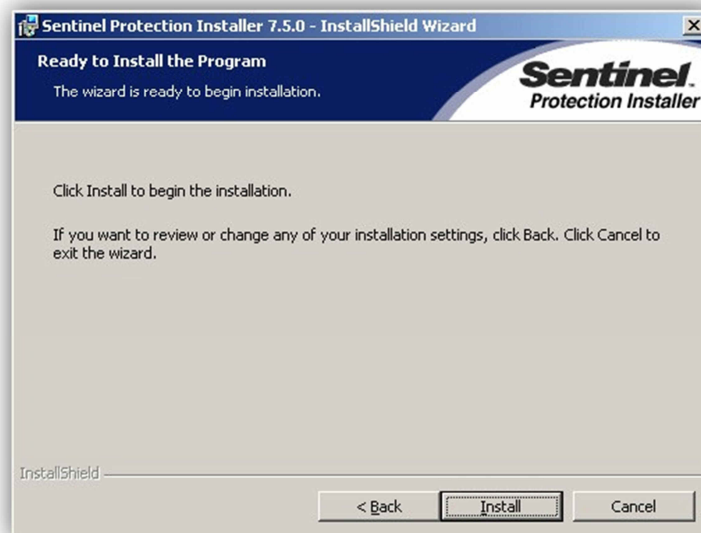
5. At the Custom Setup page, disable all options for installing the Sentinel Protection Server driver component and the Sentinel Keys Server driver component by clicking the **Selection** button, and then clicking **This feature will not be available**, as shown below.

Installing the OpX One Software



6. Click **Next**.

The installer is ready to copy its files to your computer's hard drive.

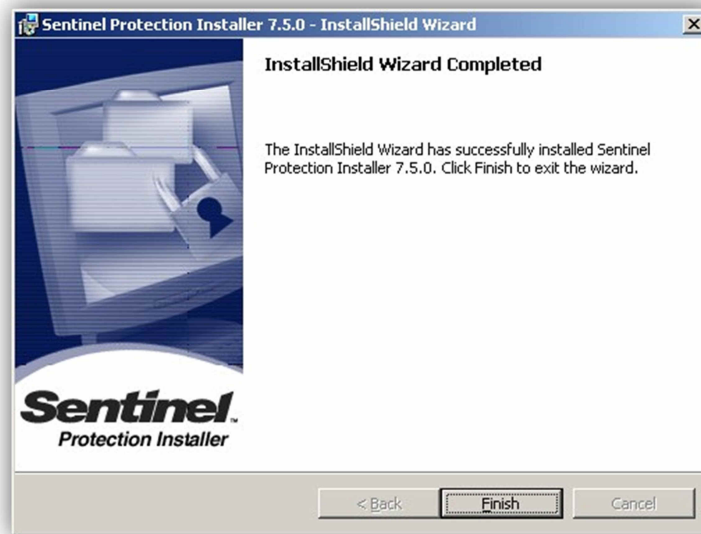


7. Click **Install**.

The files are copied to your hard drive.

8. After the Sentinel Protection driver is installed, click **Finish** at the InstallShield Wizard Complete page to complete the installation.

Installing the OpX One Software



9. Reboot your computer.
10. After the computer reboots, insert the USB memory stick into an available USB port on your computer.

*Windows detects the hardware key and displays the **Found New Hardware** message in the system tray.*



11. You now have installed the USB Registration Key. Proceed to section 2.5 to enter the Validation Code to register your OpX One system.

2.5 Registering Your OpX One System

The File Server module handles registration information for your OpX One system. An OpX One license allows you to define two station profiles on the File Server; one for the main Audio Server, and a secondary one for the Auxiliary Audio Server. The number of Studio Clients (or any other OpX One module) you can run on your network isn't limited in any way.

Before you enter your registration code into the OpX One File Server module, you must install the Sentinel Protection driver, which is the driver for the USB Registration Key (see section 2.4). If you have not already done so, install the driver, and then register your OpX One system.

➤ **To register your OpX One system**

1. Insert the USB Registration Key driver into an available USB port on the workstation running the OpX One File Server module.



2. Click the Windows Start menu and click **Programs > Broadcast Software > OpX File Server**.

The OpX One File Server module opens and the Register page prompts you for an authorization code.



Note: In the unlikely event the Register page does not appear, go to the **Edit** menu in the File Server module and click **Register**.

3. Enter your authorization code in the **Authorization Code** field. The authorization code consists of five sets of four digits, separated by dashes (for example, **####-####-####-####-####**). Your authorization code is provided by your OpX One Distributor. If you do not have an Authorization Code, or if you lost it, contact your distributor or BSI sales.

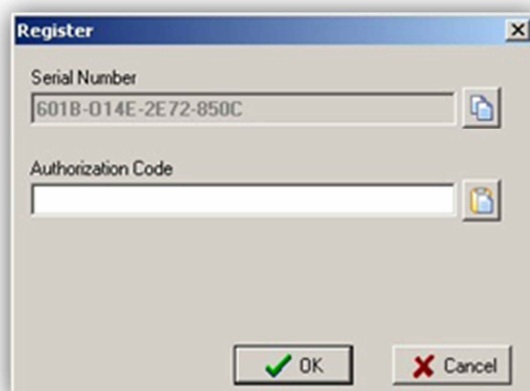


Figure 2-2. Register Window

4. After you enter your authorization code, click **OK**.

Your OpX One system is registered and your File Server is now ready to accept connections from the Audio Server, Studio Clients, and all other OpX One modules.

2.6 Where to Go from Here

You have now installed OpX One on your on-air workstation. If you are installing the OpX One modules on one or more production systems, repeat the procedure in section 2.3 for each production workstation, installing the pertinent modules for each system. After you finish installing OpX One on all your workstations, you are ready to configure the modules. Proceed to the remaining chapters in this guide for information about configuring the OpX One modules you intend to use. For assistance matching users and modules, see

Table 1-2 on page 14.

3 File Server Module

Topics:

- ^ *Starting the File Server Module (page 34)*
- ^ *Quick Tour (page 35)*
- ^ *Configuring the File Server Module (page 40)*
- ^ *Adding and Removing Stations (page 42)*
- ^ *Enabling or Disabling the Virtual Audio Server (page 46)*
- ^ *Enabling or Disabling the Voicetrack Transfer Module (page 47)*
- ^ *Remote Voice Track Transfer Module (page 48)*

This chapter describes the OpX One File Server module.

The OpX One File Server module acts as the traffic cop that oversees the repository for all your audio files and configuration files. The File Server tracks your audio files, their locations, their attributes (Artist, Title, Genre, etc.), and data transfer to and from the OpX One Audio Server and OpX One Studio Clients. An OpX One system contains a singular OpX One File Server and audio server, but can contain multiple instances of the Studio Client module and other utility modules.

3.1 Starting the File Server Module

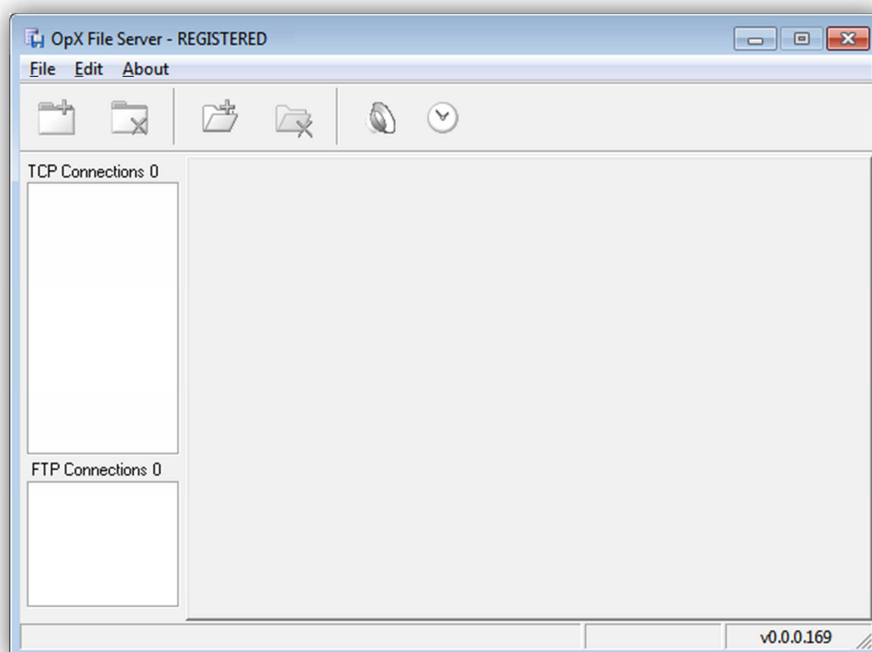
The File Server module is the foundation of the OpX One system. It directs communications between the other OpX One modules. Therefore, you must start the File Server module before you start any other OpX One module.

➤ **To start the File Server module**

1. In an available Universal Serial Bus (USB) port on your PC, insert the supplied dongle containing the OpX One serial number and authentication code.
2. On your PC, click the **Start** button on the Windows taskbar, and then click **Programs > Broadcast Software > OpX One File Server**.



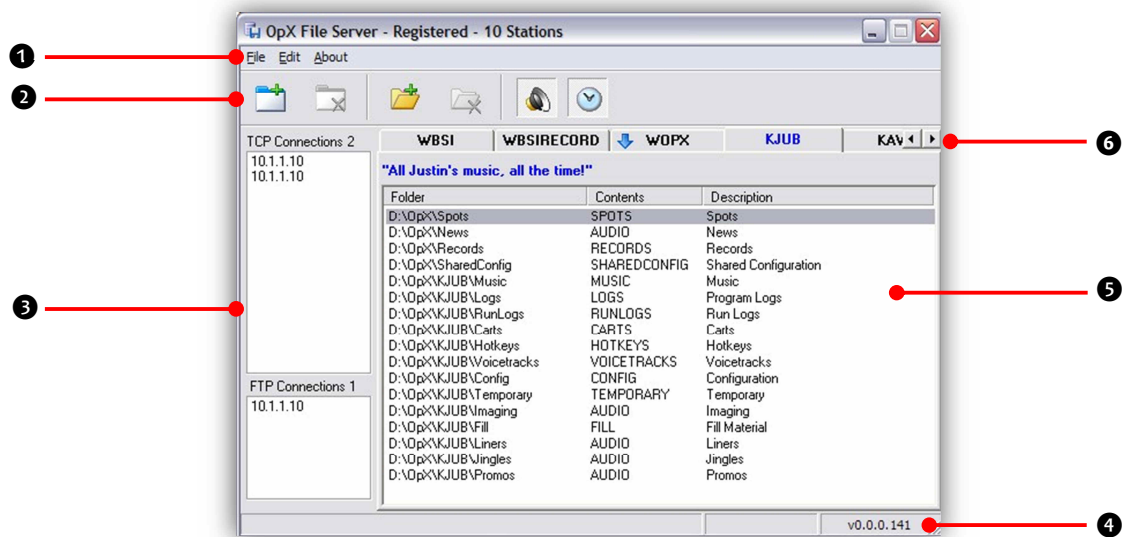
If the OpX File Server window shown below doesn't appear when it is running, it may be minimized. To open the OpX File Server when it is minimized, look for the File Server icon in the "System Tray" by the Windows System Clock (as shown at right). Hold down the CTRL key on your key while double-clicking on the OpX File Server icon to open the window shown below.





Note: If the message **Security key / driver is not installed** appears, see section 15.1.

3.2 Quick Tour

The following sections provide a quick tour of the File Server module interface.



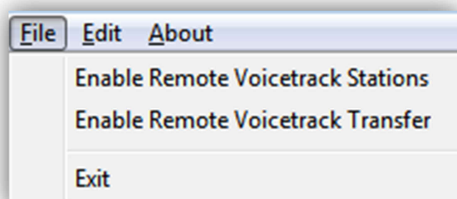
Note: The image above shows a multi-station configuration of OpX. OpX One allows only a single-station profile, plus a station profile for an Auxiliary Audio Server, so OpX One users will have a maximum of two station profile tabs.

| Number | Description |
|--------|---|
| 1 | Menu bar. See section 3.2.1. |
| 2 | Tool bar. See section 3.2.2. |
| 3 | Connection list. See section 3.2.3. |
| 4 | File Server module version. |
| 5 | Station folder list. See section 3.2.4. |
| 6 | Each station appears as a tab. Click the tab to view the contents in the station folder. If the number of folders exceeds what can be shown, use the  or  button to scroll left or right. |

3.2.1 Menu Bar

The menu bar appears at the top of the File Server window. The following sections describe the menu options.

3.2.1.1 File Menu



Enable Remove Voicetrack Stations =

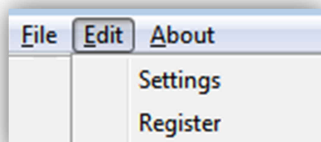
enables or disables the Audio Server to allow studio clients to edit voice tracks on other OpX One system locations. See section 3.5.

Enable Remove Voicetrack Transfer =

enables or disables the Voicetrack Transfer module. This module updates your local OpX One File Server with the latest voicetrack and log information from remote OpX One systems. See section 3.6.

Exit = exits the File Server module.

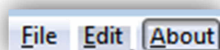
3.2.1.2 Edit Menu



Settings = configures File Server module settings. See section 3.3.

Register = shows the serial number and validation code for your OpX One software. If the message **Security key / driver is not installed** appears, see section 15.1.

3.2.1.3 About Menu



Opens a window that shows the version and build date of the File Server module you are running. This window also shows the amount of memory and virtual memory being used, and the amount of time that the File Server module has been running. See Figure 3-1 for an example. To close the window, click **OK**.

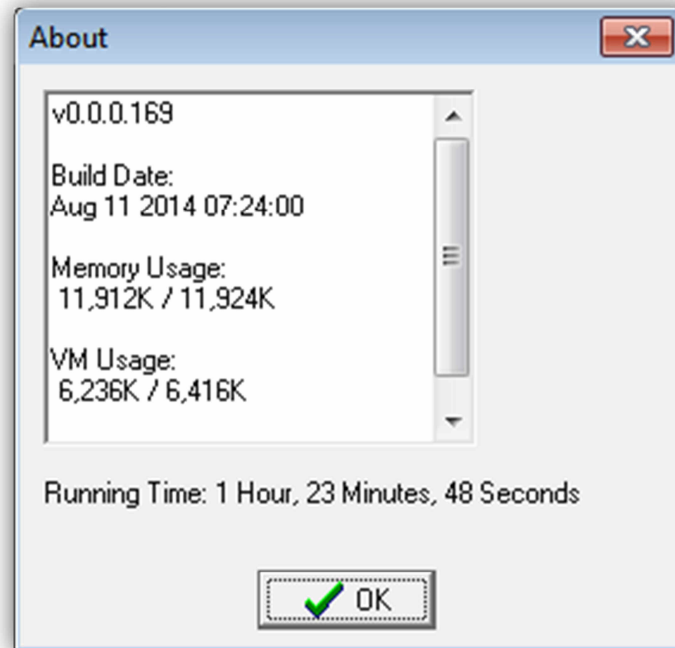
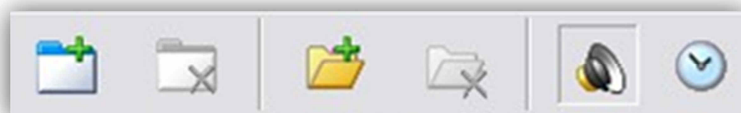


Figure 3-1. Example of About Information

3.2.2 Tool Bar

The File Server module tool bar appears below the menu bar.



Moving the screen pointer over a tool displays the tool's function as a tooltip. For example:

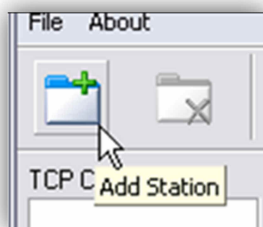








Table 3-1 describes the tools on the tool bar.

Table 3-1. File Server Module Tool Bar

| Tool | Tool Name | Description | Tool | Tool Name | Description |
|---|----------------|---|---|---------------------------------------|--|
|  | Add Station | Adds stations to the File Server module. See section 3.4.1. |  | Remove Folder | This function is disabled. Contact BSI for information about removing folders. |
|  | Remove Station | This function is disabled. Contact BSI for information about removing stations. |  | Enable Remote Voicetrack Stations | Enables remote voicetrack stations. See section 3.5. |
|  | Add Folder | Adds folders to a station. See section 3.4.2. |  | Enable Automatic Voicetrack Transfers | Updates the latest voicetrack and log information between the local and remote OpX One systems. See section 3.6. |

3.2.3 Connections List

The Connections List shows the IP address of each module accessing the File Server. If multiple modules are accessing the File Server at the same time from the same machine, the same IP address might be shown multiple times.

The Connections List has two fields:

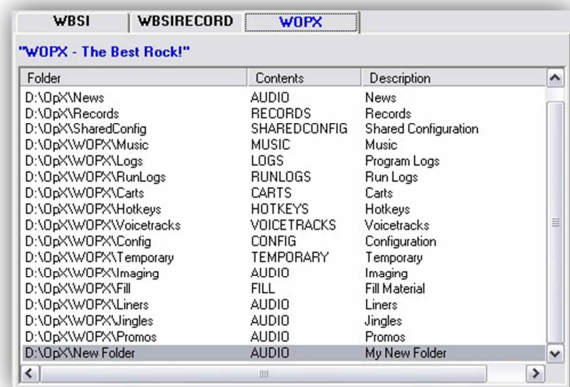
- **TCP Connections** at the top shows connections by any module performing real-time control. Examples include Studio Clients, Audio Servers and Auxiliary Audio Servers, the Import – Merge module, or the Clock Builder module. A number at the top-right (3 in the example to the right) shows the number of current connections.
- **FTP Connections** at the bottom shows any connections that are transferring files. Examples include the File Manager module, Info Edit module, or an Audio Server actively transferring audio files. A number at the top-right (1 in the example on the right) shows the number of current connections.



3.2.4 Station Folder List

The Station Folder List creates a tab for each station you add to your OpX One system. Each tab shows a list of the folders available to each station and contains the following columns:

- **Folder** = full path to the folder.
- **Contents** = type of data in the folder (for example, AUDIO, RECORDS, LOGS).
- **Description** = description of folder contents (for example, News, Records, Music).



Note: The image above shows a multi-station configuration of OpX. OpX One allows only a single-station profile, plus a station profile for an Auxiliary Audio Server, so OpX One users will have a maximum of two station profile tabs.

3.3 Configuring the File Server Module



To open the OpX File Server when it is minimized, look for the File Server icon in the “System Tray” by the Windows System Clock (as shown at right). Hold down the CTRL key on your key while double-clicking on the OpX File Server icon.



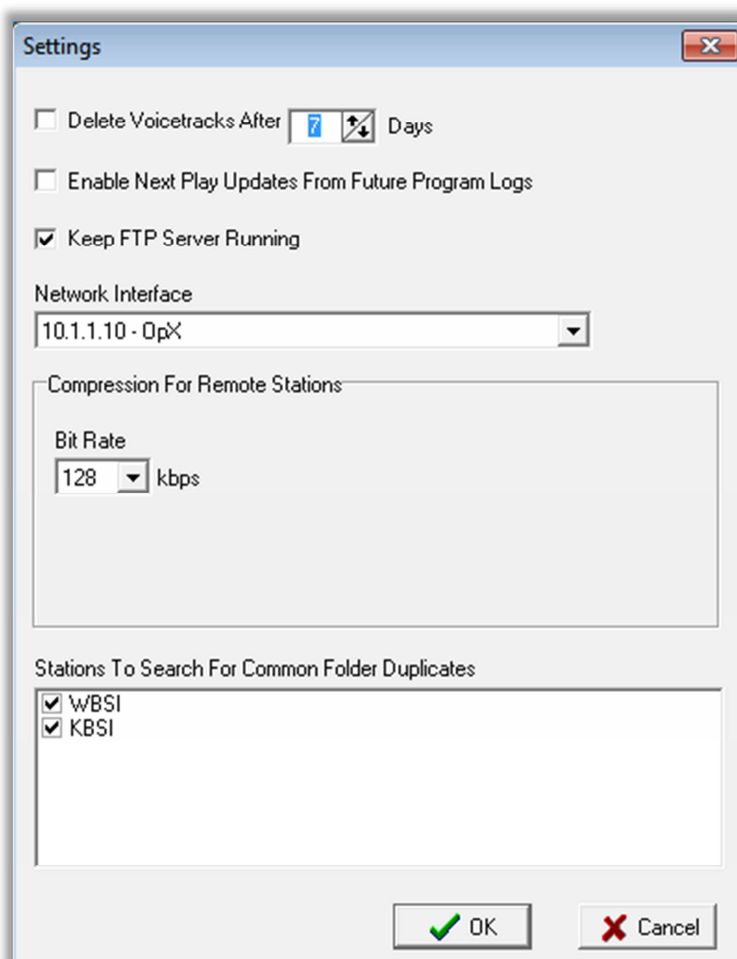
The File Server module comes with default configuration settings that should suit most users. Using the **Settings** option on the **Edit** menu, you can change these settings to suit your requirements.

➤ **To configure the File Server module settings**

1. On the **Edit** menu, click **Settings**.

The Settings dialog box shown at right appears.

2. Complete the fields in the dialog box (see



3. Table 3-2).
4. Click **OK**.

Table 3-2. Fields in the Settings Dialog Box

| Field | Description | Default |
|---|---|----------|
| Delete Voicetracks After <i>n</i> Days | Maximum number of days that the system retains voice tracks before deleting them. To enable this option, check the check box, and then either accept the preset value (7) or change it. | Disabled |
| Enable Next Play Updates From Future Program Logs | When using the studio interface, enabling this option allows the jock to see when a selected item is going to play next. If this option is enabled, OpX One looks at future logs as well as today's log to find the item. | Disabled |
| Keep FTP Server Running | Allows the File Server to check whether the FTP server is running and restarts it if it is not running. | Enabled |
| Network Interface | IP address of the OpX One network interface. | See GUI |
| Bit Rate | Allows you to change the native bitrate of the audio files in OpX One. Only files that are encoded with that bit rate will be able to be imported. | 128 kbps |
| Stations To Search For Common Folder Duplicates | Check to have OpX One search for files with the same name in other folders for the stations you are managing. | Enabled |

3.4 Adding and Removing Stations



Note: OpX One allows only a single-station profile, plus a station profile for an Auxiliary Audio Server, so OpX One users will have a maximum of two station profiles.

The OpX One system is organized by “station.” This means you must create a station on the File Server for each Audio Server or Auxiliary Audio Server you want to run.

3.4.1 Adding Stations to Your File Server

The following procedure describes how to create a single station. To create multiple stations, repeat this procedure for each additional station you want to create.

➤ To create a single station



1. On the tool bar, click

The Add Station dialog box appears, as shown on the next page.

2. Complete the fields in the dialog box (see
- 3.
- 4.
5. Table 3-3).
6. Click **OK**.
7. To create additional stations, repeat this procedure.

Table 3-3. Fields in the Add Station Dialog Box

| Field | Description | Default |
|---|--|----------------|
| Station | Enter the call sign for identifying this station. | — |
| Description | Enter a full description of the station. This description will identify this station in OpX One. | — |
| Market | Use this field and the New Market button when using Remote Voicetracking (see section 3.7). For a standard station profile, you can leave this field set to “Not Applicable,” although you can configure a market name if desired. | Not Applicable |
| Local Station – Voicetracked /Programmed Remotely | Check this check box when using Remote Voicetracking (see section 3.7). For a standard station profile, you can leave this check box unchecked. | Not checked |
| Remote Station – Voicetracked Locally | Check this check box when using Remote Voicetracking (see section 3.7). For a standard station profile, you can leave this check box unchecked. | Not checked |
| Programmed Locally | Check this check box when logs are being built at the same offsite location where voice tracks are being recorded. Leave this check box unchecked when logs are merged back at the primary location. | Not checked |
| Common Folders | Check the folders you want this station to use. All files in the Common folders can be made available to any other stations. | Checked |

3.4.2 Adding a New Folder to a Station

When you create a station in OpX One, a set of default folders is created for that station. However, you can add more folders to organize your audio files or other file types to your liking.

➤ **To add a new folder to a station**

1. On the tool bar, click



An Add Folder dialog box similar to the image shown at right appears.

2. Complete the fields in the dialog box (see Table 3-4).
3. Click **OK**.
4. Restart the station's FTP server, Audio server and File Sync modules for the change to take effect.


Table 3-4. Fields in the Add Folder Dialog Box

| Field | Description | Default |
|-------------------|--|-------------|
| Name | Enter the name of the folder. This name should allow you to differentiate this folder from other folders. | — |
| Use Common Folder | To share this folder with other stations in your OpX One system, check this check box. You can then share this station with other stations using the procedure in section 44. When checked, OpX One does not add the folder to other stations automatically. | Not checked |
| Contents | Select the type of data you will store in the folder. | — |
| Description | Enter a description of the contents in the folder. | — |

3.4.3 Adding a Common Folder to a Station

After you add a new folder to a station using the procedure in section 3.4.2, you can make that folder available on another station. This feature is useful if you want to share the same content, such as spots, jingles, sound effects, between stations.

➤ To add a common folder to a station

1. On the tool bar, click 
The Add Folder dialog box shown at right appears.

2. Complete the fields in the dialog box (see Table 3-5).
3. Click **OK**.
4. Restart the FTP server followed by the Audio Server and File Sync modules for the change to take effect.

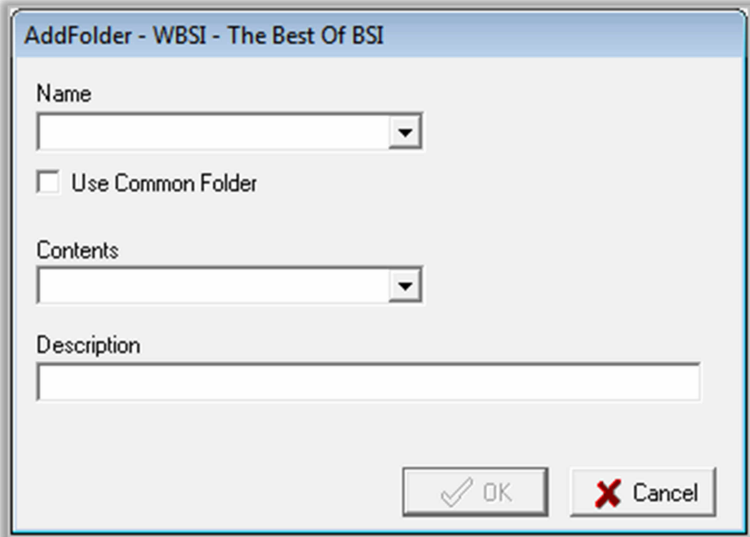


Table 3-5. Fields in the Add Folder Dialog Box

| Field | Description | Default |
|-------------------|---|-------------|
| Name | Use the drop-down list to select the folder you want to make available to this station. | — |
| Use Common Folder | Check this check box to make this folder available to this station. | Not checked |
| Contents | Select the type of data you will store in the folder. | — |
| Description | Enter a description of the contents in the folder. | — |

3.5 Enabling or Disabling the Virtual Audio Server

The File Server's Virtual Audio Server must be enabled to allow studio clients to edit voice tracks on other OpX One system locations. If the File Server's Virtual Audio Server is not running, the Remote Voicetrack station profile will not appear in the Station Selection window of the studio client.

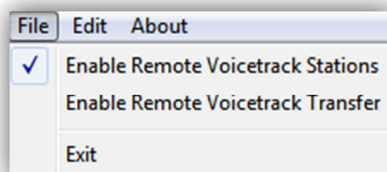
➤ **To enable the Virtual Audio Server**

1. Click **Enable Remote Voicetrack Stations** on the **File** menu.

OR

Click the  icon.

2. To confirm that the Virtual Audio Server is running, click the **File** menu and confirm that a check mark appears next to **Enable Remote Voicetrack Stations**.



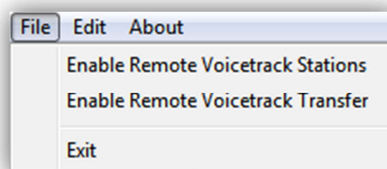
➤ **To disable the Virtual Audio Server**

1. Click **Enable Remote Voicetrack Stations** on the **File** menu.

OR

Click the  icon.

2. To confirm that the Virtual Audio Server is no longer running, click the **File** menu and confirm that a check mark no longer appears next to **Enable Remote Voicetrack Stations**.



3.6 Enabling or Disabling the Voicetrack Transfer Module

The File Server's Voicetrack Transfer module updates the latest voicetrack and log information between the local OpX One File Server and remote OpX One systems.

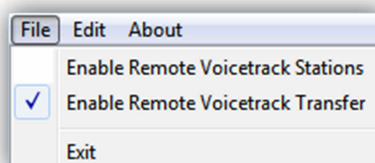
➤ To enable the Voicetrack Transfer module

1. Click **Enable Remote Voicetrack Transfer** on the **File** menu.

OR

Click the  icon.

2. To confirm that Voicetrack Transfer module is running, click the **File** menu and confirm that a check mark appears next to **Enable Remote Voicetrack Transfer**.



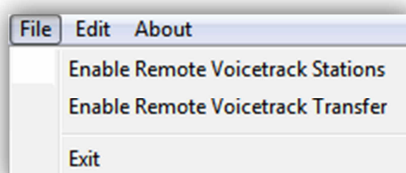
➤ To disable the Voicetrack Transfer module

1. Click **Enable Remote Voicetrack Transfer** on the **File** menu.

OR

Click the  icon.

2. To confirm that the Voicetrack Transfer module is no longer running, click the **File** menu and confirm that a check mark no longer appears next to **Enable Remote Voicetrack Transfer**.



3.7 Remote Voice Track Transfer Module

The Remote Voice Track Transfer module transfers voice tracks from a remote studio to the primary OpX One network automatically, without requiring user intervention. Just run this module on the local and remote file servers, and the files transfer between the serves automatically.

4 Audio Server Module

Topics:

- ⤴ *Starting the Audio Server Module (page 50)*
- ⤴ *Quick Tour (page 51)*
- ⤴ *Configuring the Audio Server Module (page 60)*
- ⤴ *Loading the Program Log (page 115)*
- ⤴ *Adding, Editing, and Deleting Items in the Program Log (page 116)*
- ⤴ *Playing Back a Program Log Item (page 120)*

This chapter describes the OpX One Audio Server module.


The OpX One Audio Server module handles audio playback and recording.

The OpX One Audio Server module reads your program log, interfaces with general-purpose input/output (GPIO) devices and your audio switcher, and handles background recording of audio.

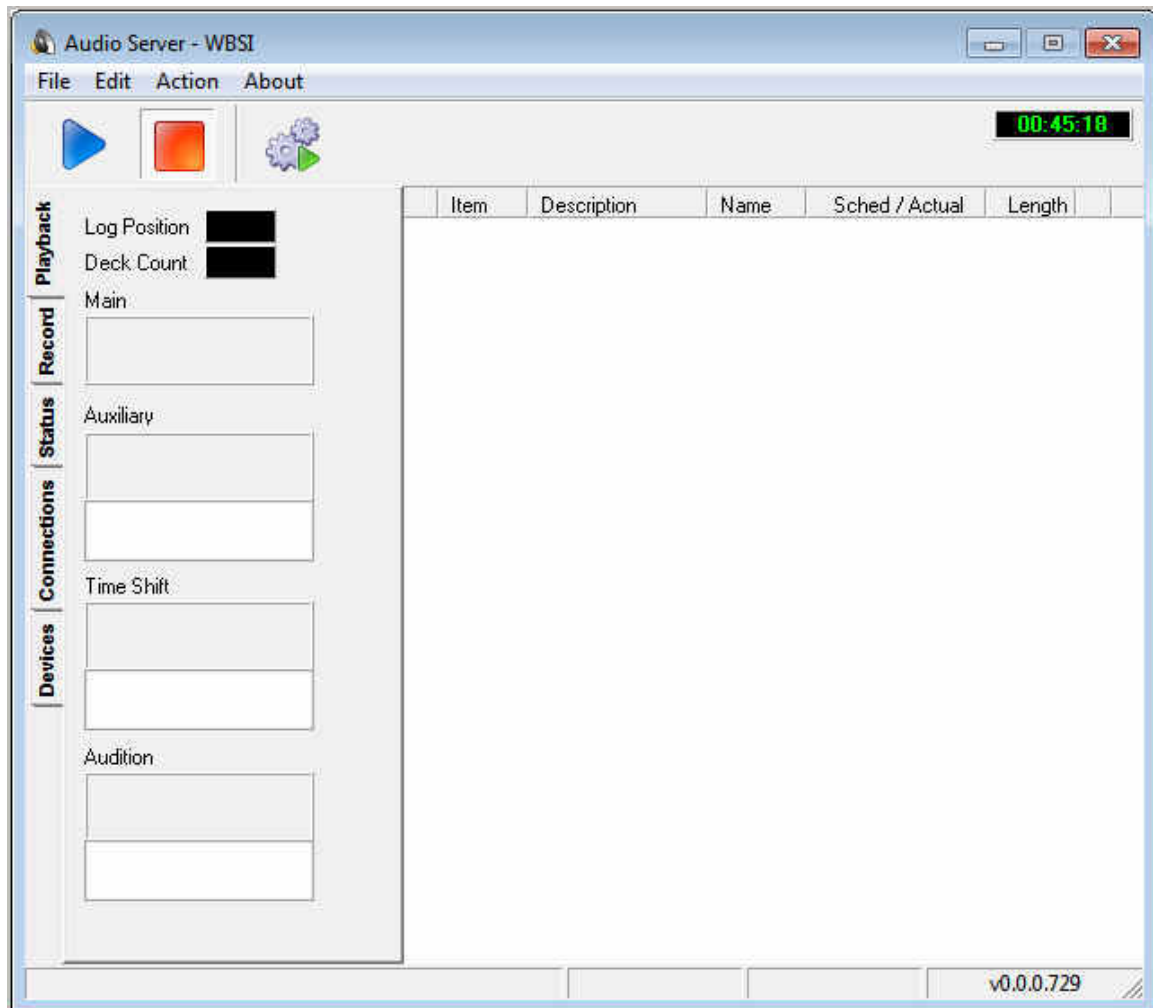
4.1 Starting the Audio Server Module

You must start the File Server module before you start the Audio Server module.

➤ **To start the Audio Server module**

1. Start the File Server module (see section 3.1).
2. Double-click the Audio Server icon on your desktop  or click the Windows Start button and click **Programs > Broadcast Software > OpX One Audio Server**.

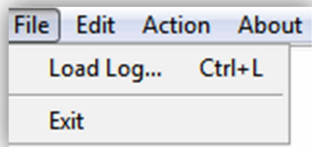
An Audio Server window similar to the following appears. The first time the window appears, it will be empty.



4.2.1 Audio Server Module Menu Bar

The menu bar appears at the top of the Audio Server window. The following sections describe the menus on the menu bar.

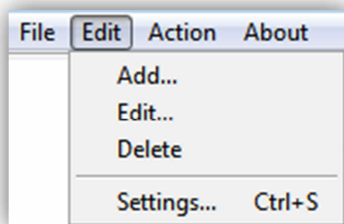
4.2.1.1 File Menu



Load Log = loads logs manually. See section 4.4.

Exit = exits the Audio Server module.

4.2.1.2 Edit Menu



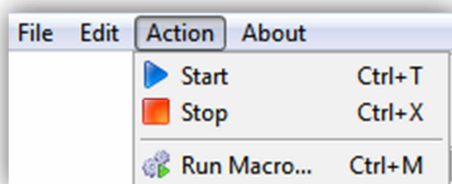
Add = inserts items manually into the currently loaded program log. See section 4.5.1.

Edit = edits items in the program log. See section 4.5.2.

Delete = deletes items from the program log. See section 4.5.3.

Settings = configures the Audio Server module settings. See section 4.3.

4.2.1.3 Action Menu

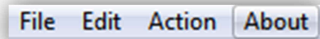


Start = starts playback of the highlighted item in the program log. See section 4.5.

Stop = stops all audio playback, including the Main, Auxiliary, Time Shift, and Audition decks. It does not stop playback of Hot Keys playing on a Studio Client module. See section 4.5.

Run Macro = allows you to run macros. Common uses are to run maintenance macros or one-time on-the-fly macros. See Appendix A - Macros.

4.2.1.4 About Menu



Opens a window that shows the version and build date of the Audio Server module you are running. This window also shows the amount of memory and virtual memory being used, and the amount of time that the Audio Server module has been running. See Figure 4-1 for an example. To close the window, click **OK**.

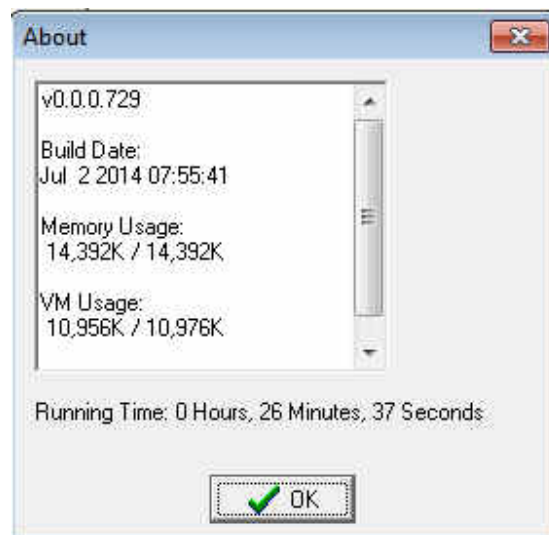


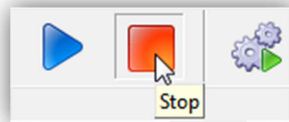
Figure 4-1. Example of About Information

4.2.2 Audio Server Tool Bar




The Audio Server module tool bar appears below the menu bar.



Moving the screen pointer over a tool displays the tool's function as a tooltip. For example:




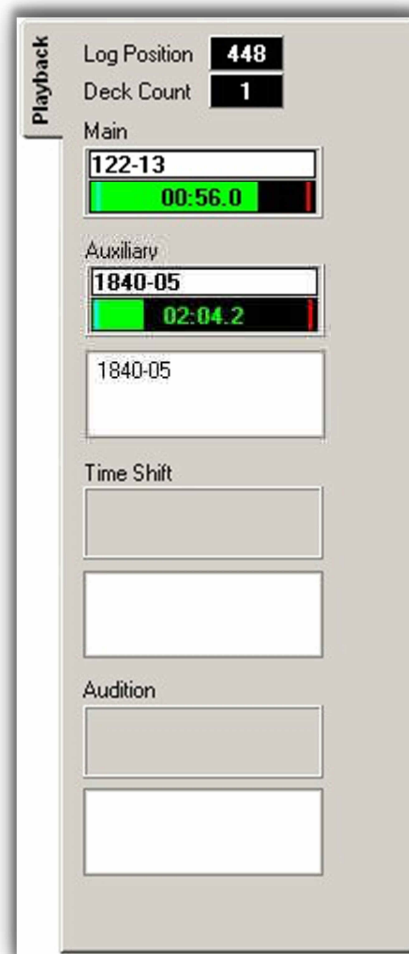
The following table describes the tools on the tool bar.

| Tool | Description |
|---|--|
|  | Starts playback of the highlighted item in the program log. See section 4.6. |
|  | Stops all audio playback, including the Main, Auxiliary, Time Shift, and Audition decks. It does not stop playback of Hot Keys playing on a Studio Client module. See section 4.6. |
|  | Allows you to run macros. Common uses are to run maintenance macros or one-time on-the-fly macros. See Appendix A - Macros. |

4.2.3 Playback Tab

The **Playback** tab on the left side of the Audio Server window shows the current status of all the audio playback devices. The following table describes the fields on the tab.

| Field | Description |
|--|---|
| Log Position | Line item in the program log that is currently playing. If playback is stopped, Log Position is the item that will play next. |
| Deck Count | <p>Total number of audio files playing on the Main Deck. For example:</p> <ul style="list-style-type: none"> • If two tracks are segueing, the Deck Count increments from 1 to 2. • When a voice track occurs, the Deck Count can increment up to 3 to show the total number of elements playing at the same time. |
| Main | <p>Shows the most recently started audio event in the Playback Deck Stack. There are three playback decks in the Playback Deck stack that cycle through the audio events in the program log. If a segue starts or multiple audio files are playing, the display shows the segueing in audio file, not the audio file segueing out.</p> <p>The top half of the display shows the name of the audio file that is currently playing. The bottom half shows the time until the end of the file is reached. A blue bar on the left side shows the intro point and a red bar is the segue point embedded into the playing audio file.</p> <p>The example below looks slightly different than the example to the right. The example below shows a song that is 02:43.6 long (2 minutes and 43.6 seconds) and has just started, while the example to the right shows a track that is 03:50.4 in length and has played $\frac{3}{4}$ of the way through, with 56.0 seconds remaining in the track.</p>  <p>The solid green bar in the example to the right shows the position of playback within the audio file and moves from left to right as the audio file playback progresses.</p> |
| Auxiliary | Shows audio events playing in the Auxiliary deck. The Auxiliary deck is used by events from trigger sets, scheduled events sets, and some macros that play audio events. |
| Time Shift Display and Time Shift event list box | The Time Shift display shows audio events for the Time Shift function (see Chapter 8). The Time Shift event list box shows stacked-up events. |
| Audition display and Audition event list box | Show items being auditioned, including audio elements played while an OpX One Studio Client is in Cue mode (see Chapter 5). |

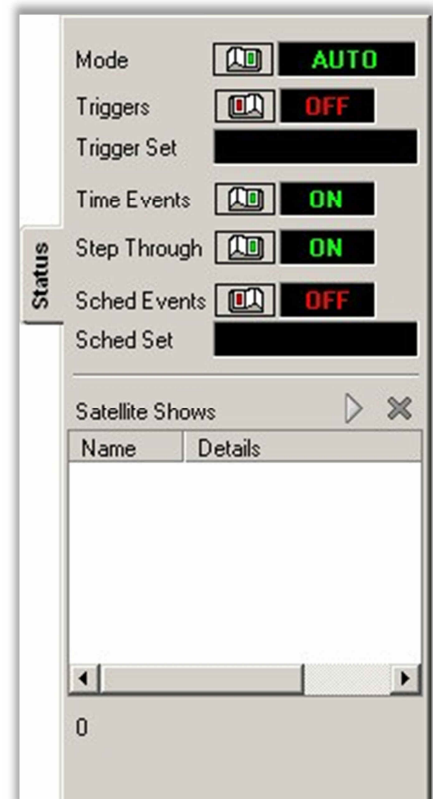


4.2.4 Record Tab

The **Record** tab shows the status of all four Audio Server record decks. If enough audio recording devices (audio cards) are installed on your Audio Server, you can record four separate audio streams at the same time.









While actively recording each deck display shows the name of the audio file being recorded on the top half, while the bottom half shows the current record position. For example, in the figure to the right, Record Deck One is recording a half-hour program and is 04:28.7 into the file. The green bar shows the progress of the audio file, with a specified length.

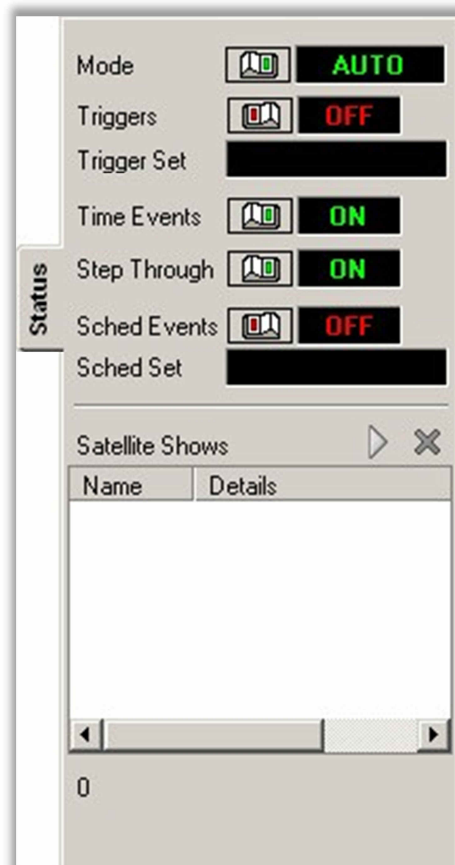
When performing a record with no specified length, no progress bar will appear; however, a countdown timer shows the maximum length possible, along with the available hard drive space.



4.2.5 Status Tab

The **Status** tab shows all real-time modifiable settings that affect the way OpX One plays audio and interacts with outboard hardware. Exercise care when changing these settings. The following table describes the fields on the tab.

| Field | Description |
|--------------|--|
| Mode | <p>Adjusts how items in the program log progress. To adjust the mode click the On () or Off () icon. Three modes are available:</p> <ul style="list-style-type: none"> In Auto mode, playback of the program log follows the specified cue types of each event. The system obeys the Start Items Using Remote Channel check box setting (see Table 4-2 on page 66). In Assist mode, similar to Auto mode, but items must be started manually. The system obeys the Start Items Using Remote Channel check box setting (see Table 4-2 on page 66). In Manual mode, cue types are ignored and each event in the program log is treated as a manual cue. The system ignores the Start Items Using Remote Channel check box. |
| Triggers | <p>Show On when the Audio Server is monitoring incoming triggers or Off when incoming triggers are disregarded. To toggle the Triggers indicator between On and Off, click the On () or Off () icon.</p> |
| Trigger Set | <p>Shows the name of the currently loaded Trigger set. If no set is loaded, this field is blank. You cannot change this field from this tab. To change it, run the LOADTRIGGERS macro from a scheduled event, trigger set, program log, Hot Key, or by clicking the Run Macro button in the Audio Server tool bar. For more information, see Appendix A - Macros.</p> |
| Time Events | <p>Shows whether the Audio Server is monitoring events in the program log with time-based cues. When Time Events are set to On, scheduled events are played at the specified times. If Time Events is set to Off, all time-based functions of the Audio Server are ignored. To toggle the Time Events indicator between On and Off, click the On () or Off () icon.</p> |
| Step Through | <p>This is an automatic system function.</p> |
| Sched Events | <p>Shows whether the Audio Server is monitoring the currently selected scheduled events set. When set to On, events in the scheduled events set run at the times specified in the set. When set to Off, all events in the set are ignored. To toggle the Sched Events indicator between On and Off, click the On () or Off () icon.</p> |
| Sched Set | <p>Shows currently loaded scheduled events. This field usually is used to run macros at specific times without being subject to what is happening in the program log. For more information, see section 4.3.11. You cannot change this field from this tab. To change it, run the LOADSCHEDULED macro from a scheduled event, trigger set, program log, Hot Key, or by clicking the Run Macro button in the Audio Server tool bar. For more information, see Appendix A - Macros.</p> |



| | |
|-----------------|--|
| Satellite Shows | Lists all Satellite Shows scheduled in the current hour's Clock (created using the OpX One Clock Builder described in Chapter 8). Satellite Shows in this field can be started manually by highlighting the Satellite Show in the list and clicking the Start button at the top of the Satellite Shows list. |
|-----------------|--|

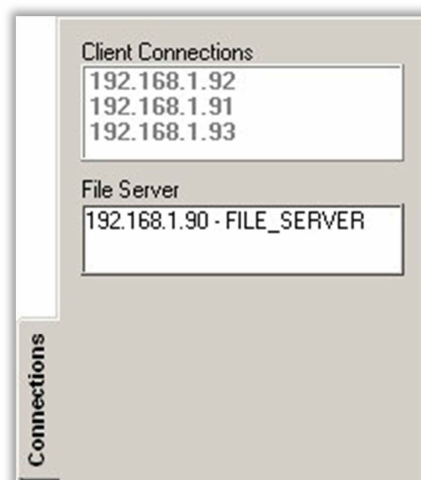
4.2.6 Connections Tab

The **Connections** tab shows the IP addresses of:

- Workstations connected to the Audio Server.
- The File Server to which the Audio Server is connected.

The following table describes the fields on the tab.

| Field | Description |
|--------------------|--|
| Client Connections | Shows the IP address of any workstation running the OpX One Studio Client. If more than one Audio Server is running on your network, Client Connections lists only the Studio Clients that are connected to this Audio Server |
| File Server | Shows the IP address of the File Server to which the Audio Server is connected. |

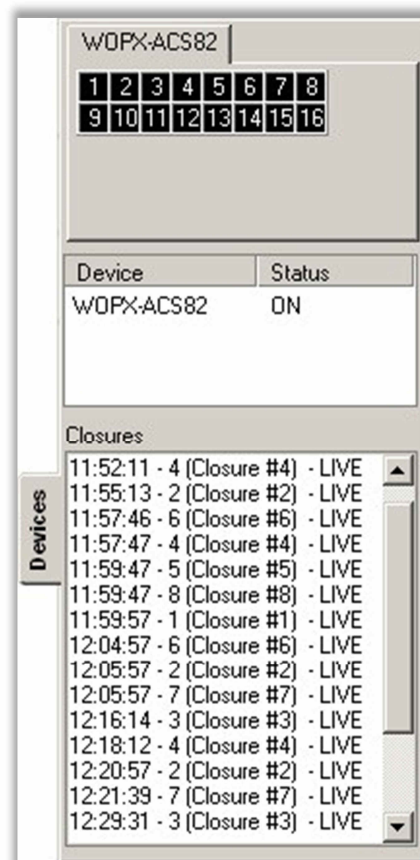


4.2.7 Devices Tab

The **Devices** tab shows the status of incoming triggers.

The following table describes the fields on the tab.

| Field | Description |
|-----------------------|--|
| Closure Grid | Shows the status of each closure input. This display is useful when setting up or troubleshooting closures to verify that your wiring connections are correct. Each indicator turns green when a closure is received. If more than one device is configured, tabs at the top appear for each. For troubleshooting, closure numbers in the grid are clickable. When you click a number a pseudo closure is generated and any function using that closure is triggered. |
| Device list | Shows the name and status of all hardware I/O devices configured on your Audio Server. You cannot change the statuses from this tab. To change it, run the DEVICE macro by clicking the Run Macro button in the Audio Server tool bar. For more information, see Appendix A - Macros. |
| Closures History List | Shows the history of all closure activity since the Audio Server was last started. The most recently activated closure appears at the bottom of the list. This list is useful when troubleshooting missing, incorrectly timed, or repeated closures to see which closures have or have not been activated. |



4.2.8 Program Log Display

The program log display lists the audio files and other automation (macro) events to be executed throughout the day (audio and macro events can also be executed from the scheduled events and Hot Keys). Think of the program log as the piano-roll and the Audio Server as the player-piano.

Program logs in OpX One are expected to be for a 24-hour period. Usually, program logs are imported from Traffic Log- and Music Log-generating applications. However, they can also be generated manually using the OpX One Import – Merge application (see Chapter 9).

| Item | Description | Name | Sched / Actual | Length | |
|-------|----------------------|-----------|----------------|--------|---|
| + 96 | KOOL 107.9 Ro... | KOOLJL... | 02:00:00 | 00:10 | 1 |
| + 97 | Andy Kim - Roc... | 1-18 | 02:00:10 | 03:24 | 2 |
| + 98 | Aretha Franklin ... | 1742-05 | 02:03:35 | 03:29 | 3 |
| + 99 | Barry White - C... | 1737-09 | 02:07:04 | 03:26 | 1 |
| + 100 | KOOL 107.9 Ro... | KOOLJL... | 02:10:30 | 00:10 | 2 |
| + 101 | BENJAMIN FR... | 5513 | 02:10:40 | 00:01 | 3 |
| + 102 | CMLS | 6473 | 02:10:41 | 00:58 | 1 |
| + 103 | ONE HOME SO... | 6432 | 02:11:39 | 00:58 | 2 |
| + 104 | KOOL 107.9 Ro... | KOOLJL... | 02:12:37 | 00:10 | 3 |
| + 105 | Blue Swede - H... | 1767-16 | 02:12:47 | 02:48 | 1 |
| + 106 | Bread - Make It... | 122-12 | 02:15:35 | 03:08 | 2 |
| + 107 | KOOL 107.9 Ro... | KOOLJing | 02:18:43 | 00:01 | 3 |
| + 108 | QUICK BOOKS ... | 8750 | 02:18:44 | 00:29 | 1 |
| + 109 | RELPAK - BAR... | 8716 | 02:19:13 | 00:59 | 2 |
| + 110 | BENJAMIN FR... | 5513 | 02:20:12 | 00:01 | 3 |
| + 111 | KOOL 107.9 Ro... | KOOLJing | 02:20:13 | 00:01 | 1 |
| + 112 | Chicago - If You... | 122-13 | 02:20:14 | 03:50 | 2 |
| + 113 | Dave Clark Five... | 1825-05 | 02:24:04 | 02:18 | 3 |
| + 114 | Diana Ross & T... | 109-10 | 02:26:22 | 02:49 | 1 |
| + 115 | KOOL 107.9 Ro... | KOOLJing | 02:30:01 | 00:01 | 2 |
| + 116 | ST MARYS - B... | 6263 | 02:30:02 | 01:00 | 3 |
| + 117 | SUDAFED - BA... | 8824 | 02:31:02 | 00:29 | 1 |
| + 118 | BENJAMIN FR... | 5513 | 02:31:31 | 00:01 | 2 |
| + 119 | KOOL 107.9 Ro... | KOOLJing | 02:31:32 | 00:01 | 3 |
| + 120 | Doobie Brothers... | 112-01 | 02:31:33 | 03:24 | 1 |
| + 121 | Dusty Springfield... | 1-19 | 02:34:57 | 02:23 | 2 |
| + 122 | Isley Brothers - ... | 1741-16 | 02:37:20 | 02:29 | 3 |
| + 123 | KOOL 107.9 Ro... | KOOLJing | 02:39:59 | 00:01 | 1 |
| + 124 | SAFEWAY - SF... | 6435 | 02:40:00 | 00:59 | 2 |
| + 125 | BENJAMIN FR... | 5513 | 02:40:59 | 00:01 | 3 |
| + 126 | FEATHER PET... | 6242 | 02:41:00 | 00:59 | 1 |
| + 127 | KOOL 107.9 Ro... | KOOLJing | 02:41:59 | 00:01 | 2 |
| + 128 | J. J. Jackson, R... | 1759-12 | 02:42:00 | 02:42 | 3 |

4.3 Configuring the Audio Server Module

The Audio Server module comes with default configuration settings. Using the **Settings** option on the **Edit** menu, you can change these settings to suit your requirements. For convenience, the settings are organized in tabs in the Settings window.

➤ **To configure the Audio Server module settings**

1. On the **Edit** menu, click **Settings**.

*The Settings dialog box appears, with the **General** tab displayed.*

Settings

Trigger Sets | Mixers | Data | Scheduled Events Sets | Modes / Logs | Closures / Relays
General | Playback | Auto Fill / Time Scaling | Record | Categories | Folders | Device I/O

Station
 WBSP - The Best Of BSI

* Changing the station requires a restart of the Audio Server to take effect.

Program Log Name Template
 %mm%dd%yy ? ☒ Clear Program Log Status

☒ This Is The Primary Audio Server For This Station

Sample Rate: 44,100 Hz Mode: Stereo

Start In Mode: Manual

Banner: AUXILIARY

☐ Sync System Time With The File Server

File Server Address: 10 . 1 . 1 . 10

OpX Network Interface: 10.1.1.10 - OpX Port Offset: 0

Axia / Wheatstone Network Interface for GPIO Devices:

OK Cancel Apply

2. Complete the fields in the dialog box tabs.

| | | |
|---|---|---|
| General Settings – see section 4.3.1 | Folder settings – see section 4.3.6 | Scheduled event sets – see section 4.3.11 |
| Playback settings – see section 4.3.2 | Device I/O settings – see section 4.3.7 | Modes and logs – see section 4.3.12 |
| Auto fill and time scaling settings – see section 4.3.3 | Trigger sets – see section 4.3.8 | Closures and relays – see section 0 |
| Record settings – see section 4.3.4 | Mixer settings – see section 4.3.9 | |
| Category settings – see section 4.3.5 | Data settings – see section 4.3.10 | |

3. When you finish, click **Apply** and **OK**.

4.3.1 General Configuration Settings

The **General** tab contains basic settings for setting up your Audio Server.

Settings

Trigger Sets | Mixers | Data | Scheduled Events Sets | Modes / Logs | Closures / Relays
General | Playback | Auto Fill / Time Scaling | Record | Categories | Folders | Device I/O

Station
WBSI - The Best Of BSI

* Changing the station requires a restart of the Audio Server to take effect.

Program Log Name Template
%mm%dd%yy ? ☒ Clear Program Log Status

☒ This Is The Primary Audio Server For This Station

Sample Rate
44,100 Hz

Mode
Stereo

Start In Mode
Manual

Banner
AUXILIARY

☐ Sync System Time With The File Server

File Server Address
10 . 1 . 1 . 10

OpX Network Interface
10.1.1.10 - OpX

Port Offset
0

Axis / Wheatstone Network Interface for GPIO Devices

OK Cancel Apply

Figure 4-2. General Tab

Table 4-1. Fields in the General Tab

| Field | Description | Default |
|---------|---|-----------------|
| Station | Allows you to select the default station. All Stations configured on your OpX One File Server will be listed. | Varies by setup |

Audio Server Module

| Field | Description | Default |
|---------------------------|---|-----------|
| Program Log Name Template | <p>Determines the file name that OpX One loads when the log automatically loads at midnight. Your entry can include standard characters and meta-variables, which are used to add a dynamic element to program log loading. Rather than limiting the log to a static name, specific sequences of characters can be used to represent dynamically changing information, such as the date, day, year, and day of the week.</p> <p>The following meta-variables can be entered into this field:</p> <ul style="list-style-type: none"> • %yy Year as a 2-digit number. Examples: For 2009, replace %yy with "09". For 2016, replace %yy with "16". • %yyyy Year as a 4-digit number. Example: For 2016, replace %yyyy with "2016". • %m Month as a 1- or 2-digit number without a leading zero. Examples: For June, replace %m with "6". For November, replace %m with "11". • %mm Month as a 2-digit number with a leading zero. Examples: For July, replace %mm with "07". For October, replace %mm with "10". • %mmm Month as a 3-letter abbreviation. Example: For November, replace %mmm with "Nov". • %mmmm Month as a full name. Example: For August, replace %mmmm with "August". • %d Day as a 1- or 2-digit number without a leading zero. Examples: For the 5th, replace %d with "5." For the 12th, replace %d with "12". • %dd Day as a 2-digit number with a leading zero. Examples: For the 7th, replace %d with "07". For the 24th, replace %d with "24". • %ddd Day as a 3-letter abbreviation. Example: For Tuesday, replace %ddd with "Tue". • %dddd Day as a full name. Example: For Friday, replace %dddd with "Friday". <p>If you generate new logs every day and your log-generation software creates logs with titles such as:</p> <ul style="list-style-type: none"> • "020108t.log", "102607t.log", or "120708t.log", enter "%mm%dd%yyt.log" into this field. • Monday.txt", "Wednesday.txt", or "Saturday.txt", enter "%dddd" into this field. • "Jan 2, 2008.log", "Nov 30, 2009.log", or "Jul 4, 2008", enter "%mmm %d, %yyyy" into this field. <p>Do not include extensions. The OpX One import process adds a .xml extension automatically. For more information about importing and merging logs, see Chapter 9.</p> | %mm%dd%yy |

Audio Server Module

| Field | Description | Default |
|--|---|---------------------|
| Clear Program Log Status | Automatically clears as- played information when a program log is loaded. This is useful for re-using logs or to ensure that the information shown when airing a log is not from a previous playback. | Checked |
| This Is The Primary Audio Server For This Station | Check this check box to have your station's main ("Primary") Audio Server write all hardware settings to the server, so the Clock Builder module and any backup Audio Servers that are running are aware of the hardware settings from your station's Primary Audio Server, such as names you assigned to audio switcher channels, triggers and relays. On backup Audio Servers, uncheck this check box to prevent inadvertent changes you make on the backup server from overwriting critical settings on your on-air Primary Audio Server. | Checked |
| Sample Rate | Selects the output sample rate (very significant when used with a digital audio card) and the rate of the audio files that OpX One will play. OpX One plays audio files that have a singular rate, so be sure all your audio files have the same sample rate. | 44,100 MHz |
| Mode | Output stereo/mono mode. A mix of stereo and mono audio files is acceptable to play with OpX One, but they must be the same sample rate. If mono is selected, all stereo and mono audio files played will be summed and output to both left and right channels. If Stereo is selected, stereo audio files remain stereo and mono files are summed out both left and right channels. | Stereo |
| Start in Mode | Determines the automation mode in which the application starts. Always use Auto. | Manual |
| Banner | Not used with a standard Audio Server. This field is reserved for naming the Auxiliary Audio Server. See Chapter 5. | AUXILIARY |
| Sync System Time With The File Server | Do not use (for legacy systems only). | Unchecked |
| File Server Address | IP address of the File Server. | |
| OpX One Network Interface | OpX One can communicate with Axia/Wheatstone hardware on a separate NIC. If OpX One detects an Axia or Wheatstone audio driver installed, select the NIC used for your Axia or Wheatstone audio network; otherwise, this field is unavailable. | 10.1.1.10 – OpX One |
| Port Offset | The communication port for clients. This value must be unique for each Audio Server. | 0 |
| Axia/Wheatstone Network Interface for GPIO Devices | If OpX One detects an Axia or Wheatstone audio driver installed, enter the local IP address of the NIC that will use the Axia or Wheatstone audio network; otherwise, this field is unavailable. | — |

4.3.2 Playback Configuration Settings

The **Playback** tab contains configuration settings for audio playback devices are designated for each playback deck in OpX One.

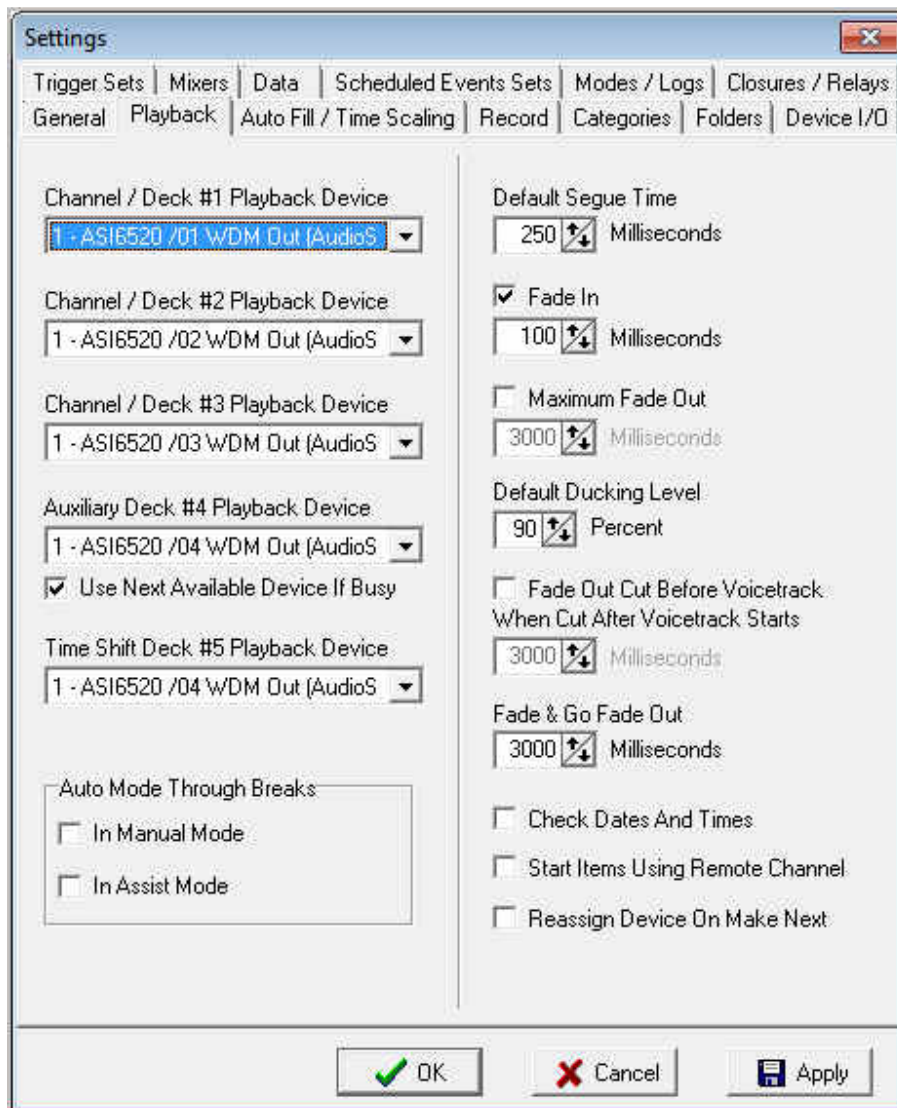


Figure 4-3. Playback Tab

Table 4-2. Fields in the Playback Tab

| Field | Description | Default |
|---|--|--|
| Channel/Deck #1 Playback Device Channel/Deck #2 Playback Device Channel/Deck #3 Playback Device | <p>These fields determine which audio devices are used for each of the three main playback decks. The main playback decks are rotated as playback occurs. The deck with which each item will play appears in the far-right column of the Program Log Display in the Audio Server.</p> <p>Because OpX One uses a software-based audio mixing engine, all three Channel Playback fields can be set to the same device or, for more control, to their own individual device. We recommend you set each deck to its own device. Typically, deck 1 would be 1WDM, deck 2 would be 2WDM, and so on. Setting each Channel Playback Device field to a different audio device is useful for manual control over fades when each device is connected to a separate channel strip on your console.</p> <p>Note: Always use WDM drivers. Never select Wave, even if Wave drivers are installed.</p> | <p>1 – ASI6520/01 WDM Out (AudioS)</p> <p>1 – ASI6520/02 WDM Out (AudioS)</p> <p>1 – ASI6520/03 WDM Out (AudioS)</p> |

Audio Server Module

| Field | Description | Default |
|------------------------------------|---|---------------------------------|
| Auxiliary Deck #4 Playback Device | Used to playback triggered events. You can select an independent device for flexibility or the same device as your main decks playback device. Because OpX One has internal mixing, multiple decks can use the same playback device. | 1 – AS16520/04 WDM Out (AudioS) |
| Use Next Available Device If Busy | Do not use for legacy systems. | Checked |
| Time Shift Deck #5 Playback Device | Used to play back satellite shows recorded using the Clock Builder Record function. If you use Time Shift functionality, select a unique device for this deck and configure a Mixer that controls this deck, so the Satellite Show settings can mute and unmute this channel independently of other playback decks for spot-replacement functionality. | 1 – AS16520/04 WDM Out (AudioS) |
| Auto Mode Through Breaks | These options allow the Audio Server to enter Auto mode automatically when breaks are encountered in Manual or Assist mode. This means that when a break starts, all the audio files segue automatically and continue to play through as if in Auto mode. | Unchecked |
| Default Segue Time | OpX One segues between audio cuts at the points you set in each audio file. To segue between cuts, even if the cuts do not have segue points set, set this option to the length a default segue should take to overlap the cuts. Even with this feature enabled, the set cue points are used if they are set in the particular cuts. This setting applies only when one or both cuts have no segue points set (see Chapter 10). | 250 milliseconds |
| Fade In | Determines the fade-in time applied to the starting audio element when a segue occurs. | Checked 100 milliseconds |
| Maximum Fade Out | Maximum fade out time of the audio element that is ending during a segue. <ul style="list-style-type: none"> • Unchecked = time of the full intro/segue (length of either the ending element's segue time or the starting element's intro time, whichever is shorter) is used as the fade out length. • Checked = fade out time is either the full intro/segue time determined on-the-fly or the length set here, whichever is shorter. | Unchecked 300 milliseconds |
| Default Ducking Level | Ducking attenuates audio elements when a voicetrack is playing. This option ducks songs or other audio element types down under a voice track. You can set the ducking level on a per-voicetrack basis, but this setting determines the default level on new voicetracks. | 90 percent |
| Fade Out Cut Before Voicetrack | Fades down the volume of the cut before a voicetrack. Use only with cuts produced in a manner that requires this feature. | Unchecked |
| When Cut After Voicetrack Starts | | 3000 milliseconds |
| Fade & Go Fade Out | Length of the cut fade when using the "Fade-and-Go" feature on the studio client. | 3000 milliseconds |
| Check Dates And Times | To have OpX One check that all your audio elements are valid for the dates set in the audio files, enable this option (see Chapter 10). If OpX One finds an audio file that is outside its date range, playback of that audio event causes an error and the event is skipped. | Unchecked |
| Start Items Using Remote Channel | When checked, the next playback deck changes to whichever pot the Start Next button is on. If Deck 2 is next and you push start on remote start 1, for example, the next cut plays out of deck 1. | Unchecked |
| Reassign Device on Make Next | When using the Make Next feature, this option always changes the device on that item to deck 1. | Unchecked |

4.3.3 Auto Fill and Time Scaling Configuration Settings

The **Auto Fill / Time Scaling** tab contains configuration settings for auto-fill and time scaling.

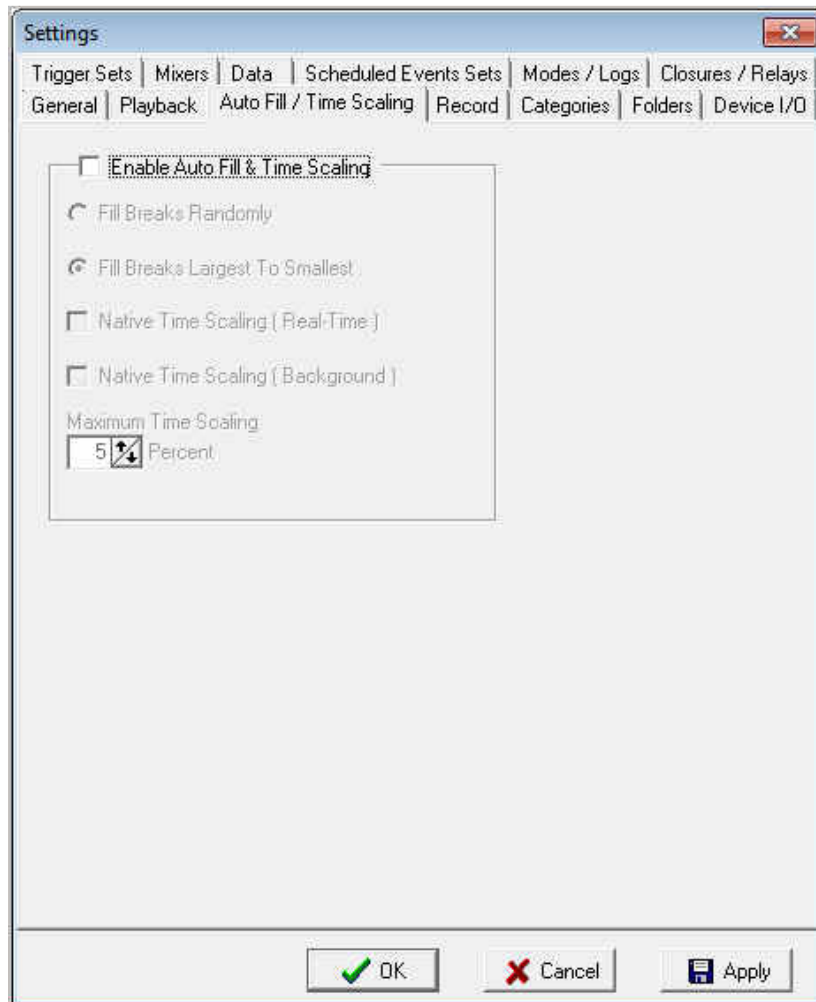


Figure 4-4. Auto Fill / Time Scaling Tab

Table 4-3. Fields in the Auto Fill / Time Scaling Tab

| Field | Description | Default |
|-----------------------------------|--|-----------|
| Enable Auto Fill and Time Scaling | When checked, Auto Fill fills mandatory breaks automatically (created with OpX One's Clock Builder module) that do not have enough content to complete their set length. The Auto Fill function uses audio files you place in your station's Fill folder. Checking this check box enables the remaining options in this tab. | Unchecked |
| Fill Breaks Randomly | When checked, audio events are chosen at random from your Fill folder until your break is filled. | Disabled |
| Fill Breaks Largest To Smallest | When checked, the longest audio file from your Fill folder that will fit your remaining break period is added to your break. If there is time in your break, that time continues to be filled with the largest file that fits that time until your break is filled completely. | Disabled |

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| Field | Description | Default |
|----------------------------------|---|----------|
| Native Time Scaling (Real-Time) | Select Native Real Time. Other selections are provided for legacy or special-case use. | Disabled |
| Native Time Scaling (Background) | Select Native Real Time. Other selections are provided for legacy or special-case use. | Disabled |
| Maximum Time Scaling | Determines the maximum time scaling percentage possible. For best results, use a value from 5 to 15%, | Disabled |

4.3.4 Record Configuration Settings

The **Record** tab has drop-down lists for selecting the record device for each record deck. You can set record decks to their own specific device for flexibility, allowing you to record four sources simultaneously. If the audio hardware installed on your system does not have four record devices available, decks can share the same record device. When two or more decks share the same record device, only one can access it at a time. The first deck to start recording with a device locks out other decks that try to use that same device until the first deck finishes recording.

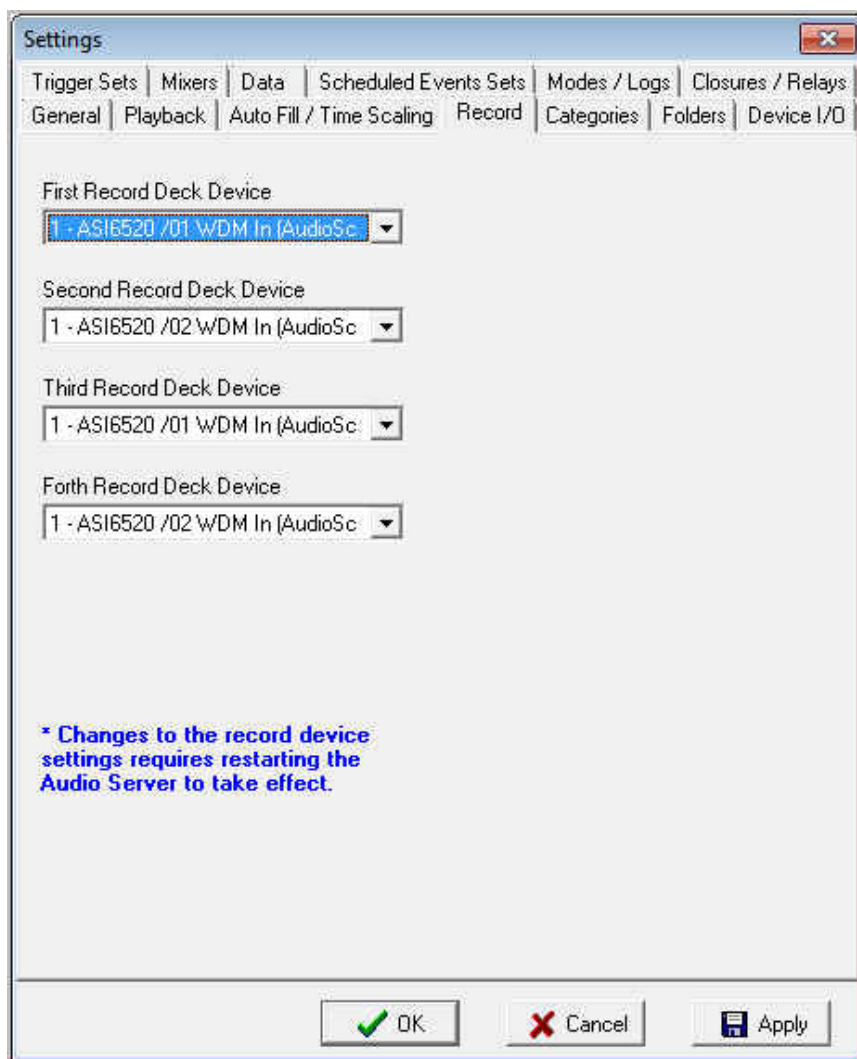


Figure 4-5. Record Tab

4.3.5 Category Configuration Settings

OpX One uses categories to organize your audio and add another dimension to the types of searches you can do when adding audio files to your logs. You add, delete, or edit categories using the **Categories** tab. You set an audio cut's category using the Info Edit module (see Chapter 10).

If you define a category field to import, you must specify it here.

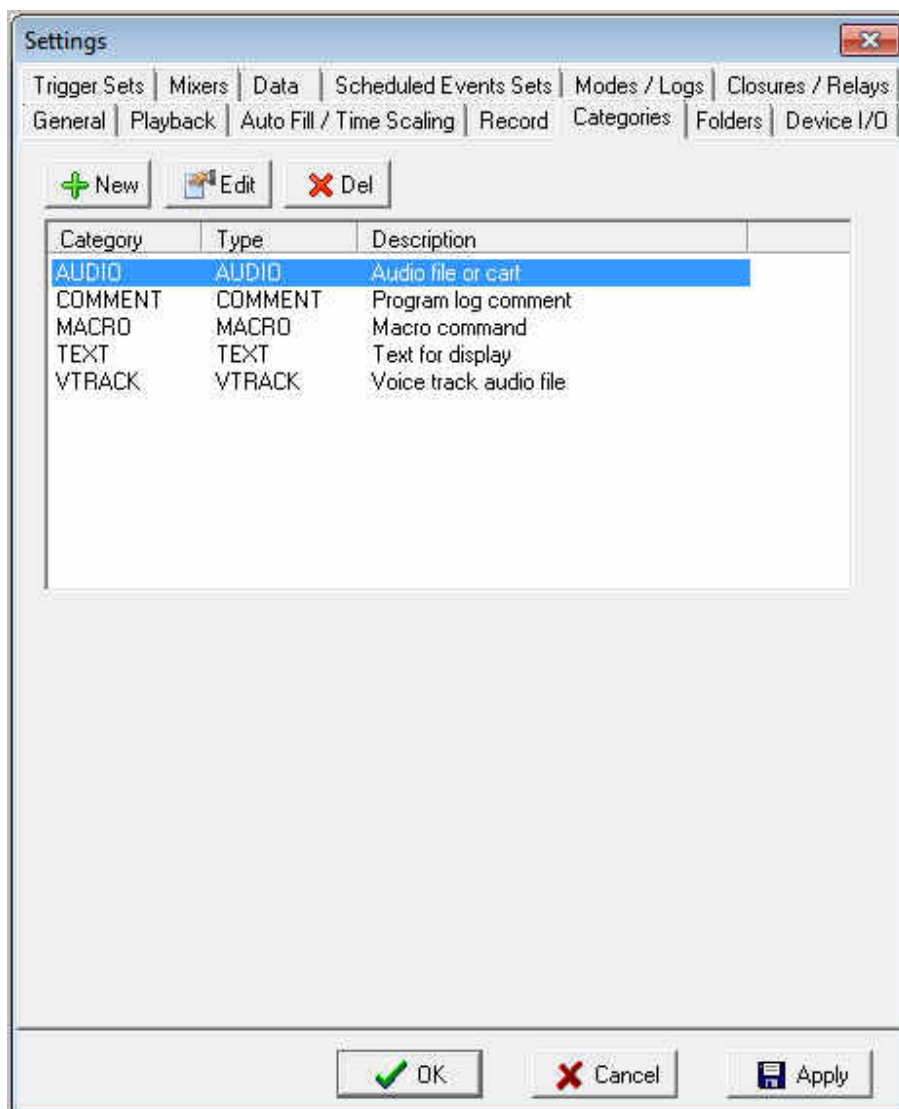


Figure 4-6. Categories Tab

The following sections describe how to add, edit, or delete categories.

4.3.5.1 Adding Categories

➤ To add a category to your Audio Server

1. In the **Categories** tab, click the **New** button



The Category dialog box appears.

A screenshot of the 'Category' dialog box. It has a title bar with 'Category' and a close button. Inside, there are three fields: 'Category' (a text input field), 'Type' (a dropdown menu with 'AUDIO' selected), and 'Description' (a text input field). At the bottom, there are 'OK' and 'Cancel' buttons.

Figure 4-7. Category Dialog Box

2. Complete the fields in the dialog box (see Table 4-4).
3. Click **OK**.

Table 4-4. Fields in the Category Dialog Box

| Field | Description | Default |
|-------------|---|---------|
| Category | Enter a short name. | — |
| Type | Select the content type. Generally, Audio should be selected. | AUDIO |
| Description | Enter a description of the category. | — |

4.3.5.2 Editing Categories

There might be times when you need to edit a category. For example, you might want to change the category name, type, or description.



Note: You cannot edit default categories.

➤ **To edit a category**

1. In the **Categories** tab, click the category you want to edit.

2. Click the **Edit** button 

The Category dialog box appears.

3. Edit the fields you want to change (see Table 4-4).

4. Click **OK**.

4.3.5.3 Deleting Categories

If you no longer need a category, you can delete it. You can delete any category, except default categories.



Note: A precautionary message does not appear before you delete a category. Therefore, be sure you do not need a category before you delete it. You cannot undo a category after it has been deleted.

➤ **To delete a category**

1. In the **Categories** tab, click the category you want to delete.

2. Click the **Del** button 

4.3.6 Folder Configuration Settings



Note: OpX One uses the folder structure settings configured in the File Server module. This tab is disabled on OpX One systems, but remains for user interface consistency with the OpX automation system.

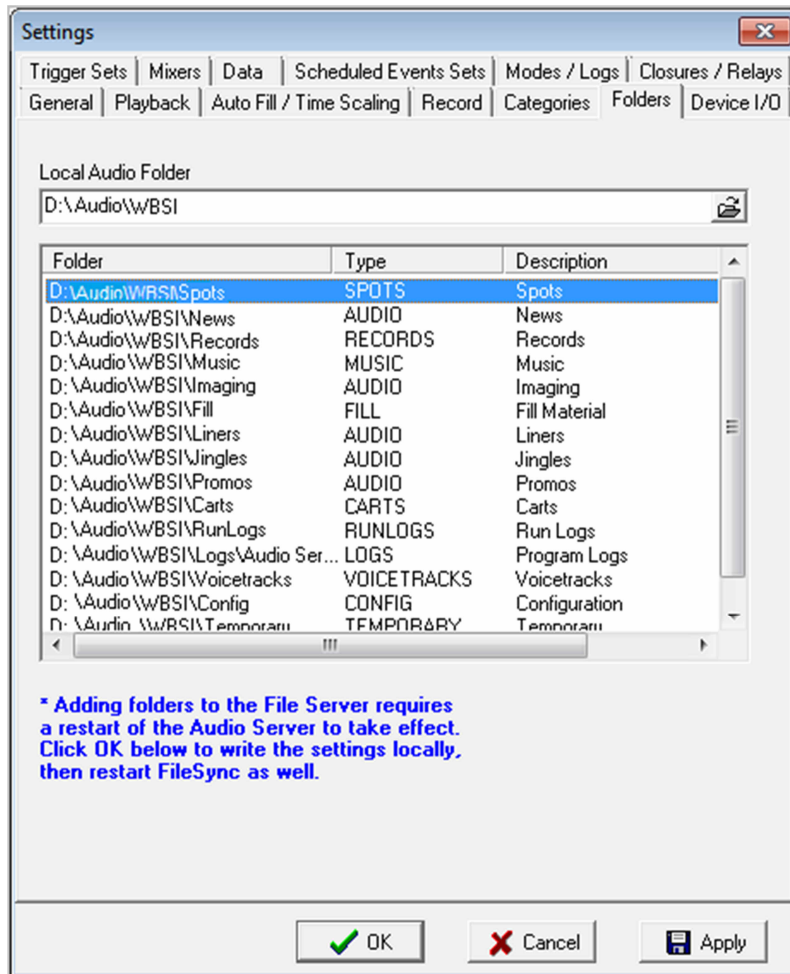


Figure 4-8. Folders Tab

4.3.7 Device Configuration I/O Settings

Any device that sends closures to outboard devices, receives closures from other devices, or switches audio is considered an I/O device. The **Device I/O** tab allows you to configure these devices.



Figure 4-9. Device I/O Tab



Note: As OpX One is an all-in-one version of OpX, the Serial Server device is not supported on OpX One installations. This button is disabled on OpX One systems, but remains for user interface consistency with the OpX automation system.

4.3.7.1 Adding a Serial Device

Serial devices supported by OpX One are the Broadcast Tools SS 8.2, ACS 8.2, SS 16.4, GPI-32, and SRC 8-III.

➤ **To add a serial device**

1. Be sure the device you are configuring for OpX One is connected and configured properly.

2. In the **Device I/O** tab, click the **Serial Device** button



The Serial Device dialog box appears.

A screenshot of the "Serial Device" dialog box. It has a title bar with "Serial Device" and a close button. The dialog is divided into several sections. At the top are "Name" and "Description" text boxes. Below these are "Port" (a spinner box set to 1) and "Device" (a dropdown menu). To the left of the "Device" section are settings for "Baud Rate" (9600), "Data Bits" (8), "Parity" (None), "Stop Bits" (1), and "Flow Control" (None). To the right of the "Device" section is a "Broadcast Tools" section containing "Unit ID#" (a dropdown set to AUTO with a red note: "Specify the actual Unit ID not AUTO when using multiple devices on the same port."), "Number Of Devices On This Port:" (a spinner set to 1), a checked checkbox "Ignore Subsequent Closures For" followed by a spinner set to 250 and the word "Milliseconds", a checked checkbox "Append Termination Characters" followed by a dropdown set to "CR/LF", and an unchecked checkbox "Connect At Start Up". At the bottom left are two buttons: "Closure Descriptions" and "Switcher Descriptions". At the bottom right are "OK" and "Cancel" buttons.

Figure 4-10. Serial Device Dialog Box

3. Complete the fields in the dialog box (see Table 4-5).
4. Click **OK**.

Table 4-5. Fields in the Serial Device Dialog Box

| Field | Description | Default |
|-------------------------------|---|------------------|
| Name | Enter a short identification name for your serial device. This name should allow you to differentiate this device from other devices. | — |
| Description | Enter a verbose description for your serial device. | — |
| Port | Enter the port number based on the requirements for your serial device. Refer to the documentation for your serial device. | 1 |
| Baud Rate | Set the baud rate, in bits per second (bps), based on the requirements for your serial device. Refer to the documentation for your serial device. | 9600 |
| Data Bits | Set the number of data bits based on the requirements for your serial device. Refer to the documentation for your serial device. | 8 |
| Parity | Set the parity setting based on the requirements for your serial device. | None |
| Stop Bits | Set the number of stop bits based on the requirements for your serial device. Refer to the documentation for your serial device. | 1 |
| Flow Control | Set the flow control based on the requirements for your serial device. Refer to the documentation for your serial device. | None |
| Device | <p>Available options are for Raw Serial Device (used for serial devices not explicitly supported by OpX One), Broadcast Tools SS 8.2, ACS 8.2, SS 16.4, GPI-32, SRC 8-III, 8&2 D/ev, SRC-16, and GPI-16.</p> <p>For Broadcast Tools devices:</p> <ul style="list-style-type: none"> • Select the ID address that your device is set to from the Unit ID# drop-down list. The default device ID for Broadcast Tools switchers purchased through BSI is "1". • To avoid invalid or "chattering" relays, set a period of time for OpX One to ignore subsequent closures after an initial closure is received enable by enabling the Ignore Subsequent Closures For... option and selecting a time-out time (in milliseconds). • To aid identification of what is connected to your Broadcast Tools device, click the Closure Descriptions and/or Switcher Descriptions buttons. <p>Figure 4-11 shows an example Closure Descriptions list. As this example shows, it is easier to remember the friendly closure name "Rosh Limberg Commercial Break Start" after several months than it is to remember "Closure #2".</p> <p>Figure 4-12 and Figure 4-13 show input and output description lists which are editable by clicking on the Switcher Descriptions button.</p> | — |
| Append Termination Characters | Select the terminating characters that will be appended to the end of each command sent to the serial device. The default termination characters are a carriage return and line feed. | Checked CR/LF |
| Connect At Start Up | To have your Audio Server connect to this serial device automatically at startup, check this check box. | Unchecked |



Figure 4-11. Closure Description List for a Broadcast Tools Switcher/Trigger Device

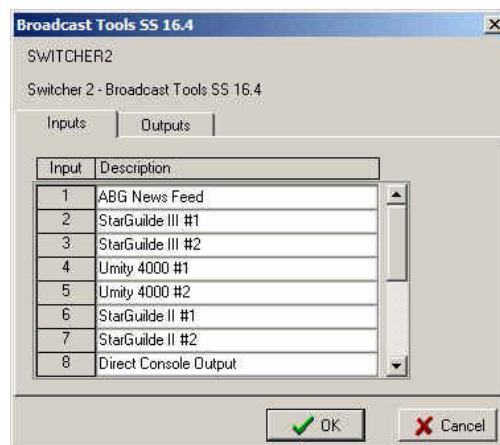


Figure 4-12. Input Description List for a Broadcast Tools Switcher Device

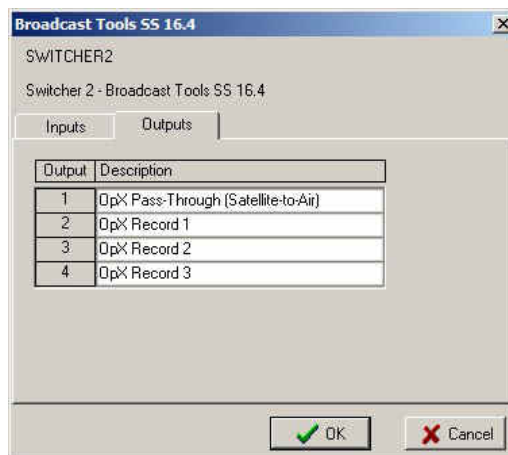


Figure 4-13. Output Description List for a Broadcast Tools Switcher Device

4.3.7.2 Adding an IP Connection

You can add a TCP or UDP IP connection to the Audio Server.

➤ **To add an IP connection**

1. In the **Device I/O** tab, click the **IP Connection** button



The IP Connection dialog box appears.

A screenshot of the "IP Connection" dialog box. It has a title bar with "IP Connection" and a close button. The dialog contains several fields: "Name" and "Description" text boxes at the top. Below them is a "Network Interface" dropdown menu showing "10.1.1.10 - OpX". There are two groups of radio buttons: "Protocol" with "TCP" selected and "UDP" unselected; and "Type" with "Client" selected and "Server" unselected. Below these is a checkbox for "Connect / Send / Disconnect" which is unchecked. Then there are "Address" and "Port" fields. The "Address" field is a dotted box containing "0 . 0 . 0 . 0". The "Port" field contains "1000". Below these is a checked checkbox for "Append Termination Characters (Must Be CR/LF To Send To Another Audio Server)" and a dropdown menu showing "CR/LF". At the bottom left is a "Connect At Start Up" checkbox which is unchecked. At the bottom left is a "Commands" button with a small icon. At the bottom right are "OK" and "Cancel" buttons.

Figure 4-14. IP Connection Dialog Box

2. Complete the fields in the dialog box (see Table 4-6).
3. Click **OK**.

Table 4-6. Fields in the IP Connection Dialog Box

| Field | Description | Default |
|-------------|---|---------|
| Name | Enter a short identification name for your IP connection. This name should allow you to differentiate this IP connection from other IP connections. | — |
| Description | Enter a verbose description for your IP connection. | — |

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| Field | Description | Default |
|-------------------------------|--|---------------------|
| Network Interface | Select the IP address of the OpX One network interface for this IP connection. | 10.1.1.20 - OpX One |
| Protocol | Select the protocol used with this IP connection: TCP or UDP | TCP |
| Type | Select whether the device at the other end of the IP connection is a client or server of the Audio Server. | Client |
| Connect/Send/Disconnect | To send requests to and disconnect from the IP connection, check this check box. | Unchecked |
| Address | Enter the IP address of the device at the other end of the IP connection. | 0.0.0.0 |
| Port | Enter the port number based on the requirements for your device. Refer to the documentation for your device. | 1000 |
| Append Termination Characters | Select the terminating characters that will be appended to the end of each command sent to the device at the other end of the IP connection. The default termination characters are a carriage return and line feed. | Checked CR/LF |
| Connect At Start Up | To have your Audio Server connect to this IP connection automatically at startup, check this check box. | Unchecked |
| Commands | Click this button to open the Watch Text dialog box (see Figure 4-15). Use this dialog box to add, edit, or delete watch text. | — |

4.3.7.2.1 Adding Watch Text

This function sends the system a command via TCP/UDP and ties that command to a macro. When the Audio Server sees that watch string, it executes the defined macro.

➤ To add watch text

1. In the IP Connection dialog box, click the **Commands** button



The Watch Text dialog box appears.

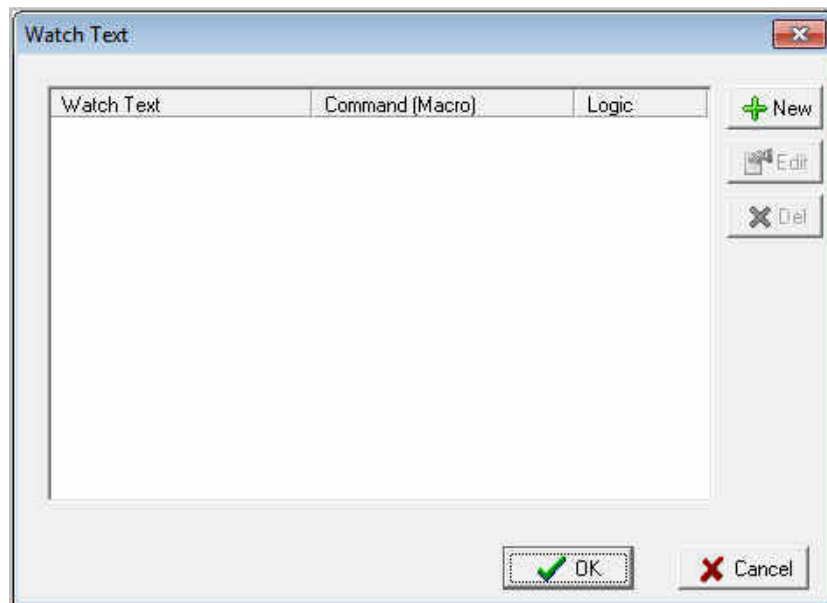


Figure 4-15. Watch Text Dialog Box

2. Click the **New** button

The Watch Text Item dialog box appears.

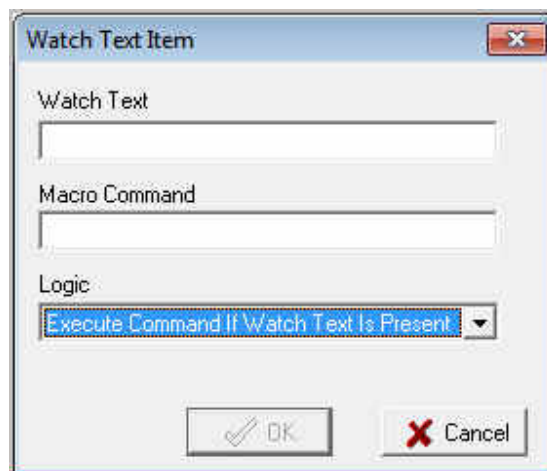


Figure 4-16. Watch Text Item Dialog Box

3. Complete the fields in the dialog box (see Table 4-7).
4. Click **OK**.

Table 4-7. Fields in the Watch Text Time Dialog Box

| Field | Description | Default |
|------------|--|---------|
| Watch Text | Enter a short identification name for your device. This name should allow you to differentiate this device from other devices. | — |

| Field | Description | Default |
|---------------|---|--|
| Macro Command | Enter the macro command. For more information, see Appendix A - Macros. | — |
| Logic | Select whether the command is to be executed when the watch text is present or missing. | Execute Command If Watch Text Is Present |

4.3.7.2.2 Editing Watch Text

There might be times when you need to edit watch text. For example, you may want to change the macro associated with the watch text.

➤ To edit watch text

1. In the IP Connection dialog box, click the **Commands** button



The Watch Text dialog box appears (see Figure 4-15).

2. Click the watch text you want to edit, and then click the **Edit** button



The Watch Text Item dialog box appears (see Figure 4-16).

3. Edit the fields you want to change (see Table 4-7).
4. Click **OK**.

4.3.7.2.3 Deleting Watch Text

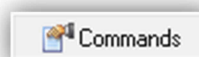
If you no longer need watch text, you can delete it.



Note: A precautionary message does not appear before you delete watch text. Therefore, be sure you do not need watch text before you delete it. You cannot undo watch text after it has been deleted.

➤ To delete watch text

1. In the IP Connection dialog box, click the **Commands** button



The Watch Text dialog box appears (see Figure 4-15).

2. Click the watch text you want to delete.
3. Click the **Del** button



4.3.7.3 Adding an Axia GPIO Node

- To add an Axia I/O GPIO node to your OpX One Audio Server

1. In the **Device I/O** tab, click the **AXIA GPIO Node** button



The Axia GPIO dialog box appears.

A screenshot of the Axia GPIO dialog box. It has a title bar "Axia GPIO" with a close button. Inside, there are two text input fields labeled "Name" and "Description". Below them is a section labeled "Axia GPIO Address" with a numeric input field showing "0.0.0.0". There is a checkbox labeled "Connect At Start Up" which is currently unchecked. At the bottom left is a button labeled "Closure Descriptions" with a small icon. At the bottom right are "OK" and "Cancel" buttons.

Figure 4-17. Axia GPIO Dialog Box

2. Complete the fields in the dialog box (see Table 4-8).
3. Click **OK**.

Table 4-8. Fields in the Axia GPIO Dialog Box

| Field | Description | Default |
|----------------------|--|-----------|
| Name | Enter a short identification name for your Axia GPIO node. This name should allow you to differentiate this device from other devices. | — |
| Description | Enter a verbose description for your Axia GPIO node. | — |
| Axia GPIO Address | Enter the IP address of your Axia I/O device. | 0.0.0.0 |
| Connect At Start Up | To have your Audio Server connect to this Axia GPIO node automatically at startup, check this check box. | Unchecked |
| Closure Descriptions | To make identification of what is connected to your Axia I/O device's closures, click this button and enter friendly names for each connected closure. Figure 4-18 shows an example of a closure list. | — |



Figure 4-18. Example of a Closure List

4.3.7.4 Adding an Axia Driver GPIO

- To add an Axia I/O Driver GPIO to your OpX One Audio Server

1. In the **Device I/O** tab, click the **AXIA Driver GPIO** button



The Axia GPIO dialog box appears.

A screenshot of the 'Axia GPIO' dialog box. It has a title bar with 'Axia GPIO' and a close button. Inside, there are two text input fields labeled 'Name' and 'Description'. Below them is a section labeled 'Axia GPIO Address' containing a text box with the IP address '127.0.0.1'. At the bottom left is a checkbox labeled 'Connect At Start Up'. At the bottom right are 'OK' and 'Cancel' buttons.

Figure 4-19. Axia GPIO Dialog Box

2. Complete the fields in the dialog box (see Table 4-9).
3. Click **OK**.

Table 4-9. Fields in the Axia GPIO Dialog Box

| Field | Description | Default |
|---------------------|---|-----------|
| Name | Enter a short identification name for your Axia Driver GPIO device. This name should allow you to differentiate this device from other devices. | — |
| Description | Enter a verbose description for your Axia driver GPIO device. | — |
| Axia GPIO Address | Enter the IP address of your Axia driver GPIO device. | 0.0.0.0 |
| Connect At Start Up | To have your Audio Server connect to this Axia driver GPIO device automatically at startup, check this check box. | Unchecked |

4.3.7.5 Adding an Audio Server

- To add an audio server to your OpX One Audio Server

1. In the **Device I/O** tab, click the **Audio Server** button



The Audio Server dialog box appears.

 A screenshot of the "Audio Server" dialog box. It has a title bar with "Audio Server" and a close button. Inside, there are two text input fields for "Name" and "Description". Below them is a "Station" dropdown menu. Underneath is an "Address" field with four input boxes, each containing a "0". At the bottom left is a checkbox labeled "Connect At Start Up" which is unchecked. At the bottom right are "OK" and "Cancel" buttons.

Figure 4-20. Audio Server Dialog Box

2. Complete the fields in the dialog box (see Table 4-10).
3. Click **OK**.

Table 4-10. Fields in the Audio Server Dialog Box

| Field | Description | Default |
|---------------------|--|-----------|
| Name | Enter a short identification name for your audio server. This name should allow you to differentiate this device from other devices. | — |
| Description | Enter a verbose description for your audio server. | — |
| Station | Select a station that will be used with this audio server. Only stations with currently running Serial Device Servers are shown in the drop-down list. | |
| Address | Enter the IP address of the audio server. | 0.0.0.0 |
| Connect At Start Up | To have your Audio Server connect to this audio server automatically at startup, check this check box. | Unchecked |

4.3.7.6 Adding a Wheatstone Console

- To add a Wheatstone console to your OpX One Audio Server

1. In the **Device I/O** tab, click the **Wheatstone Console** button



The Wheatstone Console dialog box appears.

Figure 4-21. Wheatstone Console Dialog Box

2. Complete the fields in the dialog box (see Table 4-11).
3. Click **OK**.

Table 4-11. Fields in the Wheatstone Console Dialog Box

| Field | Description | Default |
|---|---|-------------------------------|
| Name | Enter a short identification name for your Wheatstone console. This name should allow you to differentiate this device from other devices. | — |
| Description | Enter a verbose description for your Wheatstone console. | — |
| Console Address | Enter the IP address of your Wheatstone console. | 0.0.0.0 |
| Deck #1 – Console Channel Deck #2 – Console Channel Deck #3 – Console Channel | Select a remote device. | 1 2 3 |
| Ignore Subsequent Deck Starts | To have your Audio Server connect to this Wheatstone console automatically at startup, check this check box and either accept the default value or change it. | Unchecked 250 milliseconds |

| Field | Description | Default |
|----------------------|---|-----------|
| Connect At Start Up | To have your Audio Server connect to this Wheatstone console automatically at startup, check this check box. | Unchecked |
| Closure Descriptions | To make identification of what is connected to your Wheatstone console's closures, click this button and enter friendly names for each connected closure. | — |

4.3.7.7 Adding a Wheatstone Blade

- To add a Wheatstone blade to your OpX One Audio Server

1. In the **Device I/O** tab, click the **Wheatstone Blade** button



The Wheatstone Blade dialog box appears.

A dialog box titled 'Wheatstone Blade' with a close button (X) in the top right corner. It contains two text input fields for 'Name' and 'Description'. Below these is a 'Blade Address' field with four digits, each in its own box, currently showing '0'. A checkbox labeled 'Ignore Subsequent Deck Starts' is checked. Below the checkbox is a numeric spinner set to '250' with a dollar sign (\$) to its right. There is an unchecked checkbox for 'Connect At Start Up'. At the bottom left are two buttons: 'Closure Descriptions' and 'Switcher Descriptions'. At the bottom right are 'OK' and 'Cancel' buttons.

Figure 4-22. Wheatstone Blade Dialog Box

2. Complete the fields in the dialog box (see Table 4-12).
3. Click **OK**.

Table 4-12. Fields in the Wheatstone Blade Dialog Box

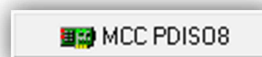
| Field | Description | Default |
|-------------------------------|---|-------------------------------|
| Name | Enter a short identification name for your Wheatstone blade. This name should allow you to differentiate this device from other devices. | — |
| Description | Enter a verbose description for your Wheatstone blade. | — |
| Blade Address | Enter the IP address of your Wheatstone blade. | 0.0.0.0 |
| Ignore Subsequent Deck Starts | To have your Audio Server connect to this Wheatstone blade automatically at startup, check this check box and either accept the default value or change it. | Unchecked 250 milliseconds |
| Connect At Start Up | To have your Audio Server connect to this Wheatstone blade automatically at startup, check this check box and either accept the default value or change it. | Unchecked 250 milliseconds |
| Closure Descriptions | To make identification of what is connected to your Wheatstone blade's closures, click this button and enter friendly names for each connected closure. | — |
| Switcher Descriptions | To make identification of the inputs and outputs connected to your switcher, click this button and enter friendly names for each input and output. | — |

4.3.7.8 Adding an MCC PDISO8

➤ **To add an MCC PDISO8 to your OpX One Audio Server**

1. Install and configure the device (refer to the documentation for your device).

2. In the **Device I/O** tab, click the **MCC PDISO8** button



The Measurement Computing Device dialog box appears.

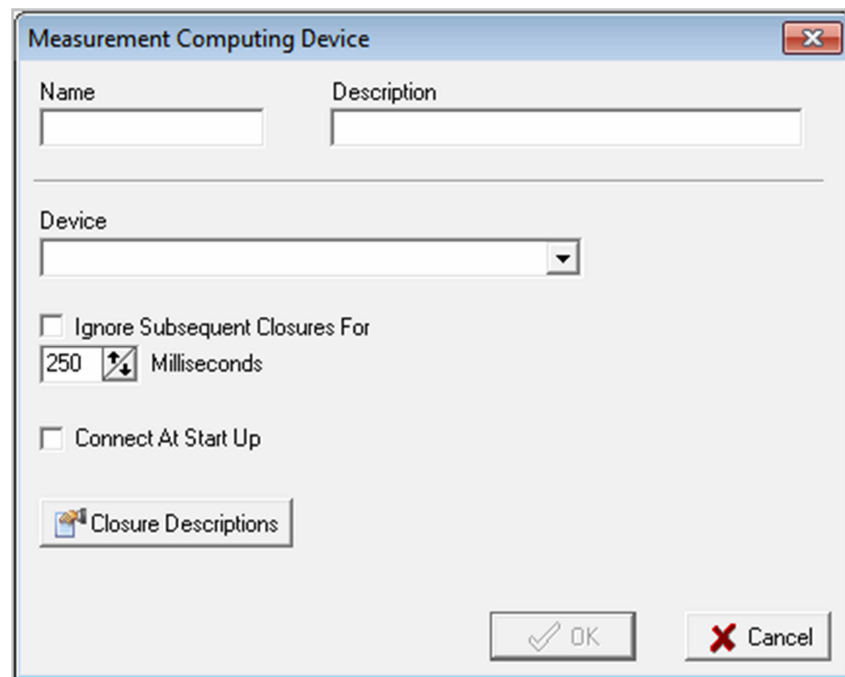


Figure 4-23. Measurement Computing Device Dialog Box

3. Complete the fields in the dialog box (see Table 4-13).
4. Click **OK**.

Table 4-13. Fields in the Measurement Computing Device Dialog Box

| Field | Description | Default |
|--------------------------------|---|-------------------------------|
| Name | Enter a short identification name for your device. This name should allow you to differentiate this device from other devices. | — |
| Description | Enter a verbose description for your serial server device. | — |
| Device | Select a remote device. | — |
| Ignore Subsequent Closures For | To minimize accidental double-clicks, check this check box to set a period of time that each console button will be ignored after it is clicked. | Unchecked 250 milliseconds |
| Connect At Start Up | To have your Audio Server connect to this device automatically at startup, check this check box. | Unchecked |
| Closure Descriptions | To make identification of what is connected to your Wheatstone blade's closures, click this button and enter friendly names for each connected closure. | — |

4.3.7.9 Adding a SAS Console

- **To add a SAS console to your OpX One Audio Server**

1. In the **Device I/O** tab, click the **SAS Console** button



The SAS Console dialog box appears.

The screenshot shows the 'SAS Console' dialog box. It contains the following fields and controls:

- Name:** A text input field.
- Description:** A text input field.
- Console Address:** A text input field showing '0 . 0 . 0 . 0'.
- Port:** A spin box showing '1024'.
- Console ID (1 - 256):** A spin box showing '1'.
- Deck #1 Source Channel # (1 - 9998):** A spin box showing '1'.
- Deck #2 Source Channel #:** A spin box showing '2'.
- Deck #3 Source Channel #:** A spin box showing '3'.
- Connect At Start Up:** An unchecked checkbox.
- Buttons:** 'OK' and 'Cancel' buttons at the bottom right.

Figure 4-24. SAS Console Dialog Box

2. Complete the fields in the dialog box (see Table 4-14).
3. Click **OK**.

Table 4-14. Fields in the SAS Console Dialog Box

| Field | Description | Default |
|--|---|-------------|
| Name | Enter a short identification name for your SAS console. This name should allow you to differentiate this device from other devices. | — |
| Description | Enter a verbose description for your SAS console. | — |
| Console Address | Enter the IP address of the SAS console. | 0.0.0.0 |
| Port | Enter the port number based on the requirements for your SAS console. Refer to the documentation for your SAS console. | 1024 |
| Console ID | Enter a unique ID to identify this SAS console. | 1 |
| Deck #1 Source Channel # Deck #2 Source Channel # Deck #3 Source Channel # | Determine which audio devices are used for each of the three main playback decks. The main playback decks are rotated as playback occurs. The deck with which each item will play appears in the far-right column of the Program Log Display in the Audio Server. Because OpX One uses a software-based audio mixing engine, all three Channel Playback fields can be set to the same device or, for more control, to their own individual device. Setting each Channel Playback Device field to a different audio device is useful for manual control over fades when each device is connected to a separate channel strip on your console. | 1 2 3 |
| Connect At Start Up | To have your Audio Server connect to this device automatically at startup, check this check box. | Unchecked |

4.3.7.10 Adding an Advantech Device

➤ To add an Advantech Device to your OpX One Audio Server

1. In the **Device I/O** tab, click the **Advantech** button



The I/O Card Device dialog box appears.

Figure 4-25. I/O Card Device Dialog Box

2. Complete the fields in the dialog box (see Table 4-15).
3. Click **OK**.

Table 4-15. Fields in the I/O Card Device Dialog Box

| Field | Description | Default |
|----------------------|---|-----------|
| Name | Enter a short identification name for your I/O card device. This name should allow you to differentiate this device from other devices. | — |
| Description | Enter a verbose description for your I/O card device. | — |
| I/O Card Type | Select the type of I/O card. | — |
| Device | Select the device. | — |
| Connect At Start Up | To have your Audio Server connect to this I/O card automatically at startup, check this check box. | Unchecked |
| Closure Descriptions | To make identification of what is connected to your Axia I/O device's closures, click this button and enter friendly names for each connected closure. Figure 4-18 on page 84 shows an example of a closure list. | |

4.3.8 Trigger Set Configuration Settings

You can use triggers to execute (play) audio events, carts, or macros when a closure is received by your I/O device hardware. Common uses for this function are to use Start and/or Stop buttons on your console, or “button boxes” for sound effects or other audio events.

A “trigger set” is a list of audio or macro events that are executed when a closure is received. OpX One allows you to define multiple trigger sets and load them at will. They can be loaded using the `LOADTRIGGERS` macro (see Appendix A - Macros).

4.3.8.1 Creating Trigger Sets

➤ **To create a new trigger set**

1. From the Settings dialog box, click the **Trigger Sets** tab.

The Trigger Sets tab appears.

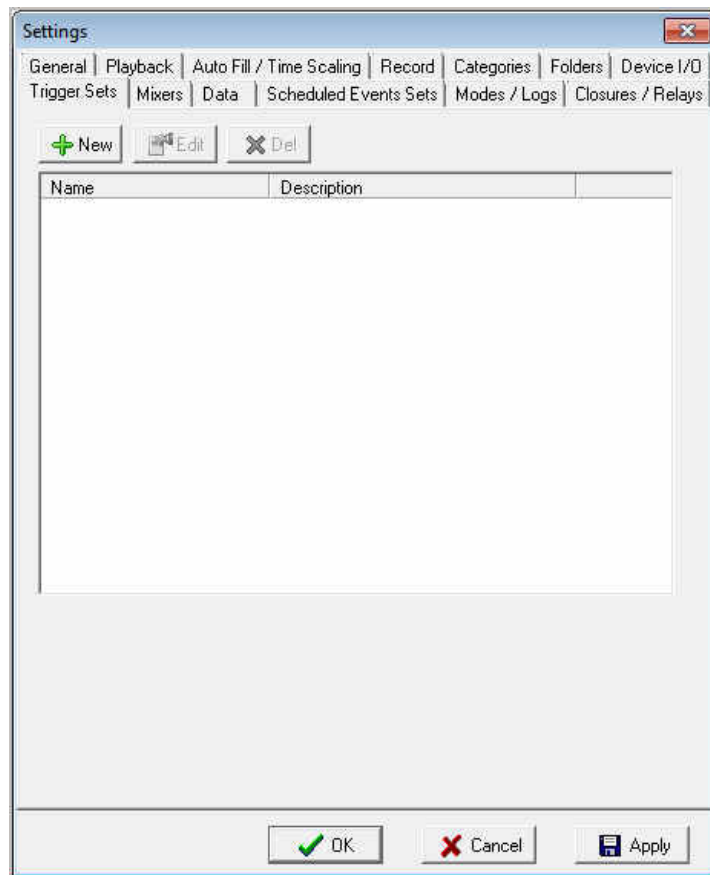
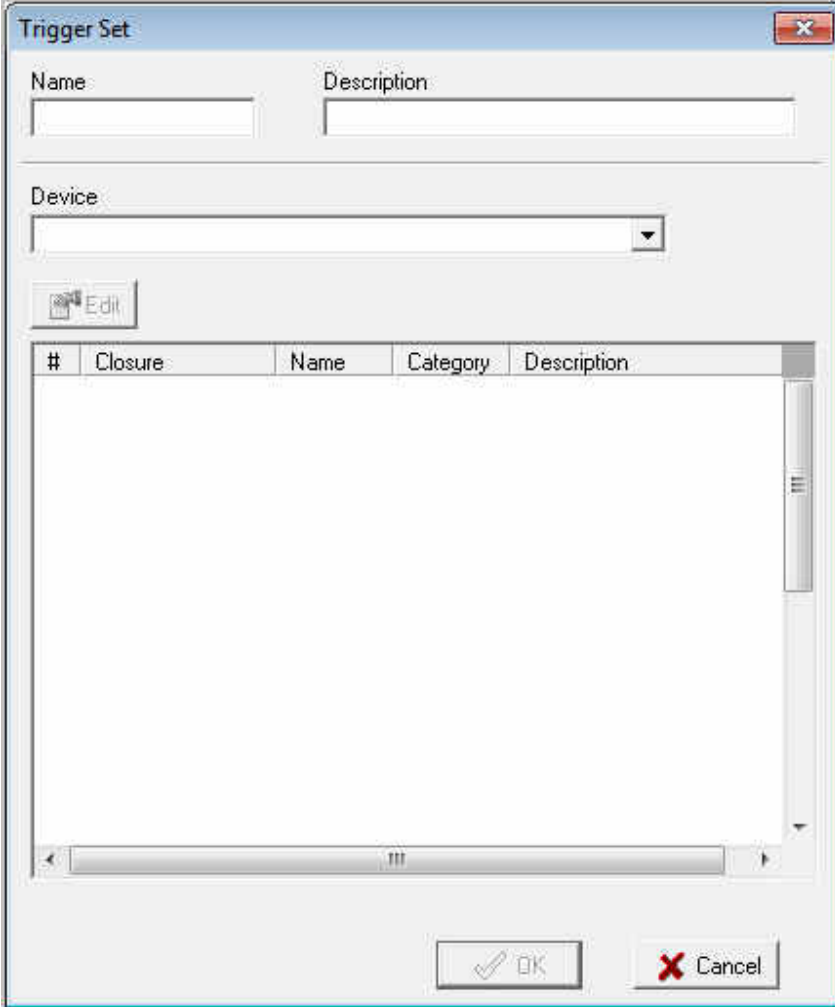


Figure 4-26. Trigger Sets Tab

2. Click the **New** button 

The Trigger Set dialog box appears.

The image shows a 'Trigger Set' dialog box. It has a title bar with a close button. Inside, there are two text input fields at the top labeled 'Name' and 'Description'. Below these is a 'Device' dropdown menu. Under the dropdown is an 'Edit' button with a small icon. The main area of the dialog is a table with five columns: '#', 'Closure', 'Name', 'Category', and 'Description'. The table is currently empty. At the bottom right of the dialog are 'OK' and 'Cancel' buttons.**Figure 4-27. Trigger Set Dialog Box**

3. Complete the fields in the dialog box (see Table 4-16).
4. Click **OK**.

Table 4-16. Fields in the Trigger Set Dialog Box

| Field | Description | Default |
|-------------|---|---------|
| Name | Enter a short identification name for your trigger set. This name should allow you to differentiate this trigger from other trigger sets. | — |
| Description | Enter a verbose description for the trigger set. | — |
| Device | Select the device from which triggers will be received for this trigger set. | — |

4.3.8.1.1 Editing Trigger Sets

There might be times when you need to edit a trigger set. For example, you may want to change the macro associated with the trigger set.

➤ **To edit a trigger set**

1. From the Settings dialog box, click the **Trigger Sets** tab.

The Trigger Sets tab appears (see Figure 4-26).

2. Click the trigger set you want to edit, and then click the **Edit** button



The Trigger Set Item dialog box appears (see Figure 4-27).

3. Edit the fields you want to change (see Table 4-16).
4. Click **OK**.

4.3.8.1.2 Deleting Trigger Sets

If you no longer need a trigger set, you can delete it.



Note: A precautionary message does not appear before you delete a trigger set. Therefore, be sure you do not need a trigger set before you delete it. You cannot undo a trigger set after it has been deleted.

➤ **To delete a trigger set**

1. From the Settings dialog box, click the **Trigger Sets** tab.

The Trigger Sets tab appears (see Figure 4-26).

2. Click the trigger set you want to delete.

3. Click the **Del** button



4.3.9 Mixer Configuration Settings

The **Mixers** tab allows OpX One to control the volume levels of the audio devices installed on your Audio Server machine. The main use for this function is control of audio feeds from satellite. The Audio Server allows you to configure 10 mixer profiles, each of which is controllable using macros or the Clock Builder.

4.3.9.1 Creating and Editing Mixers

➤ **To create and edit mixers**

1. From the Settings dialog box, click the **Mixers** tab.

A tab similar to the following appears.

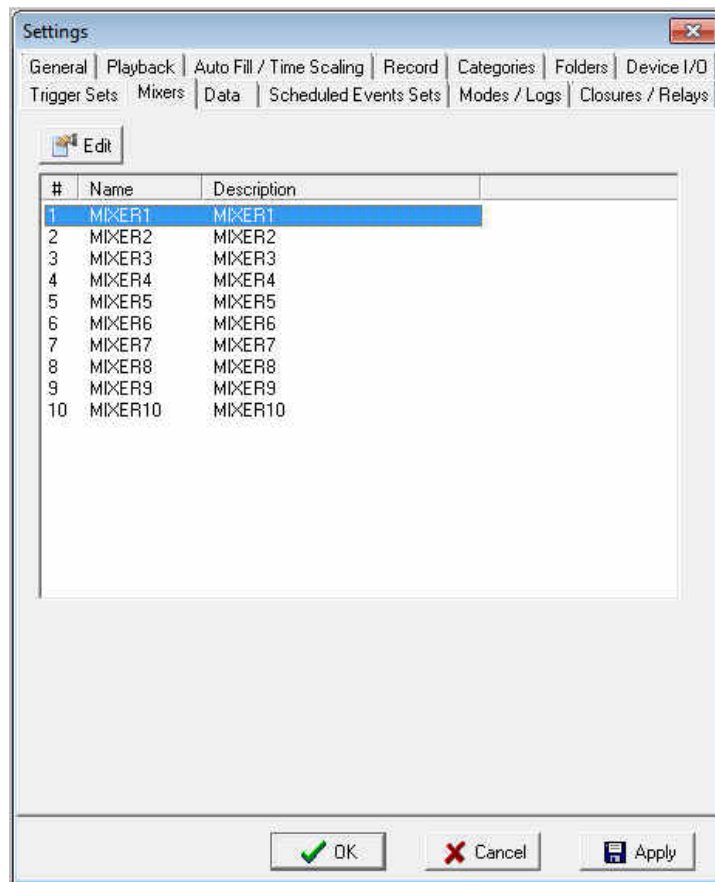


Figure 4-28. Mixers Tab

2. Click a mixer profile, and then click the **Edit** button

A Mixer dialog box similar to the following appears. The left pane shows the installed audio devices and each controllable function of that audio card.

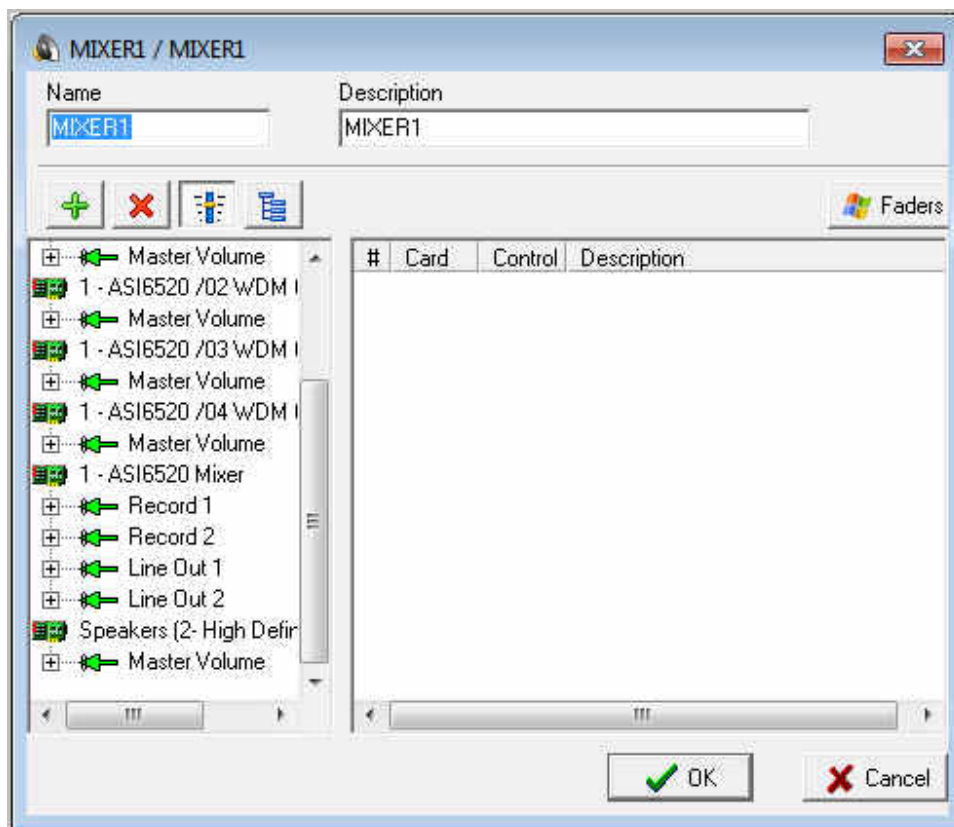




Figure 4-29. Mixer Dialog Box

3. Browse through the list in the left pane, and then click the volume control of your desired device's input or output channel.
4. To add a device to the mixer's configuration, click the **Add** button .
5. To remove a control from the mixer's configuration, click the control in the list on the right (see Figure 4-30), and then click the **Delete** button .
6. When you finish, click **OK**.

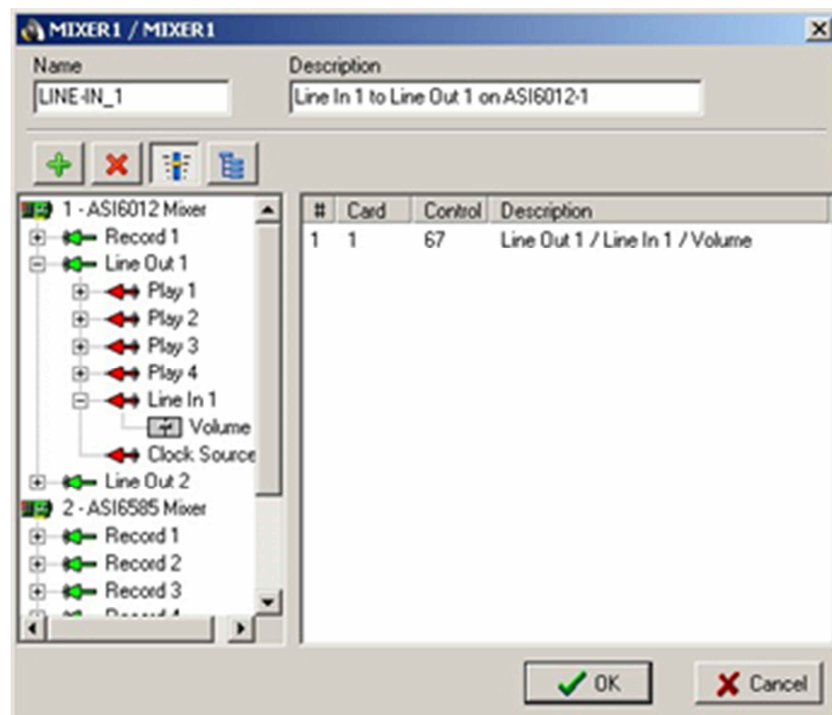


Figure 4-30. Mixer Editor with an AudioScience 6012 Model's Line In 1 Pass-through Volume Control Selected

4.3.10 Data Configuration Settings

PAD data is an industry-standard format of data output used by HD radio transmitters and RDS encoders to communicate artist, title, description, and other information. PAD data can either be transmitted from the OpX One system as a .xml file or sent directly to a device in the network using that device's IP address.

To set up PAD data output, use the **Data** tab.

➤ **To configure data settings**

1. From the Settings dialog box, click the **Data** tab.

A tab similar to the following appears.

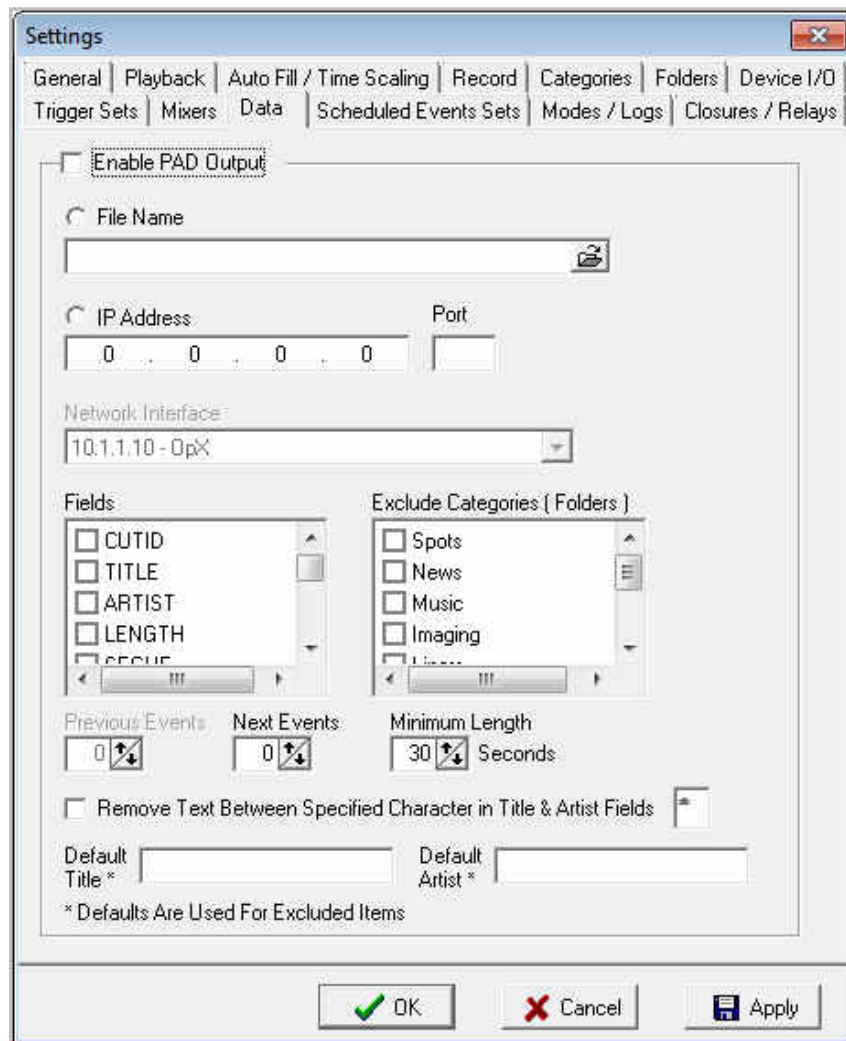



Figure 4-31. Data Tab

2. Complete the fields in the dialog box (see Table 4-17).
3. Click **OK**.

Table 4-17. Fields in the Data Tab

| Field | Description | Default |
|--------------------|---|--------------|
| Enable PAD Output | To enable output of PAD data, check this check box. Checking this check box enables the remaining options in this tab. To stop PAD data output, uncheck this check box. | Unchecked |
| File Name | To output PAD data to an .xml-formatted file, check this option, and then either enter the path in the field or click the  icon, go to the desired location in the Browse dialog box, and click Open . Each time the PAD data is updated, the specified filename are overwritten with a new copy of the .xml file with the current data | — |
| IP Address Port | To have OpX One output PAD data directly to an IP address, check this option and enter the IP address and port number. | 0.0.0.0 — |

Audio Server Module

| Field | Description | Default |
|---|--|---------------------|
| Network Interface | Select the IP address of the OpX One network interface for this IP connection. | 10.1.1.20 - OpX One |
| Fields | Check the types of data you want the Audio Server to output as PAD data. | Unchecked |
| Exclude Categories (Folders) | Each audio event category you defined appears in this list. Enabling one of the categories in this list causes the Audio Server to NOT output the data of that event to the PAD data. | Unchecked |
| Previous Events | Allows you to transmit a desired number of data about the previously played audio events. | 0 |
| Next Events | Allows you to set a desired number of upcoming audio events for which to send data. | 0 |
| Minimum Length | Allows you to exclude events from transmitting PAD data. This option allows you to set a limit by the minimum length audio events that must send PAD data (in seconds). | 30 seconds |
| Remove Text Between Specified Characters in Title & Artist Fields | Data from the artist or title fields to be removed when sending pad data. This is determined using a special character. If you have an artist that looked like "grateful dead 1972 Europe," for example, and you want the pad to display only "grateful dead," you can change it to "grateful dead *1972 Europe*" and set the asterisk to be our delimiting character. | * |
| Default Title | Default information to show if the title field is missing or if the data is being skipped. | — |
| Default Artist | Default information to show if the artist field is missing or if the data is being skipped. | — |

4.3.11 Scheduled Event Set Configuration Settings

Scheduled events are events – audio files or macros – that you want executed automatically, regardless of other activities being performed in the program log or any other area of the OpX One system. They are ideal for starting records, sending serial strings, controlling switchers, or any other event you want to occur in the background.

Scheduled events are added to a Scheduled Events Set. OpX One works with only one Scheduled events set at a time. It is possible to switch which Scheduled Events Set is loaded using the `LOADSCHEDULED` macro. You can also run the `LOADSCHEDULED` macro from within a Scheduled Events Set to load another Scheduled Events Set.

4.3.11.1 Adding Scheduled Events

➤ **To configure a new scheduled event**

1. From the Settings dialog box, click the **Scheduled Events Sets** tab.

A tab similar to the following appears.

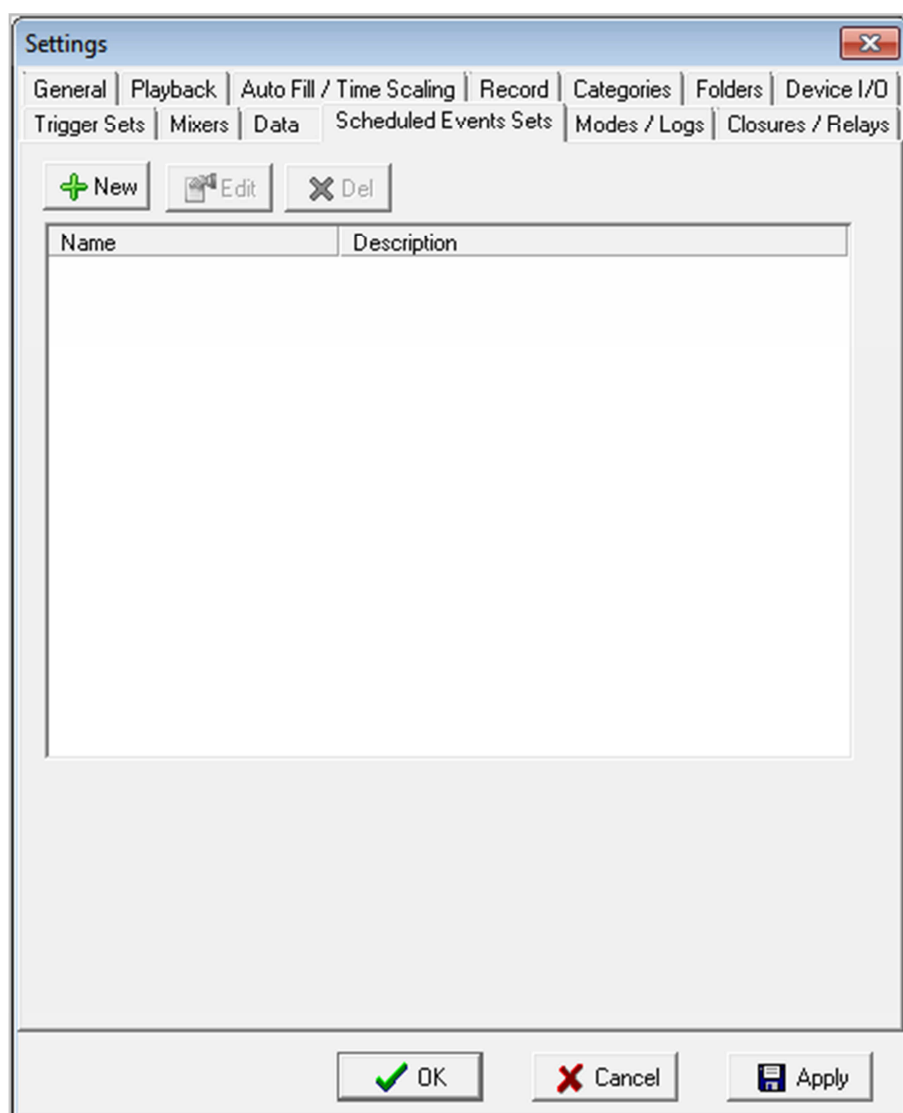
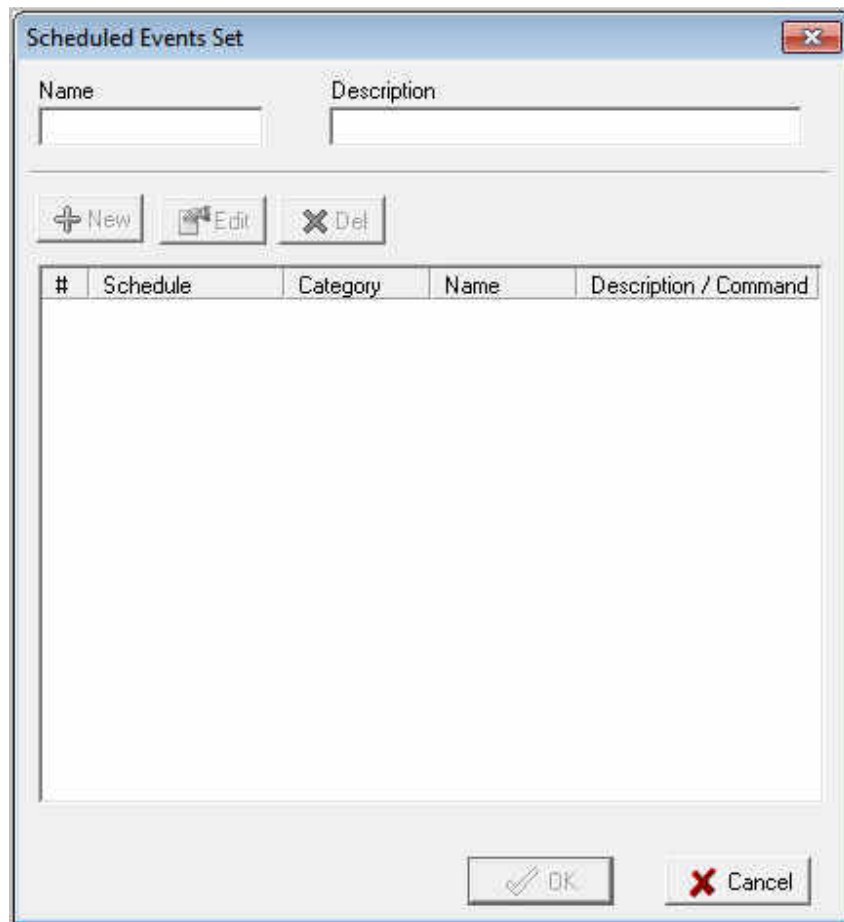


Figure 4-32. Scheduled Events Sets Tab

2. Click the **New** button 

The Scheduled Event Sets dialog box appears.

**Figure 4-33. Scheduled Event Sets Dialog Box**

3. Complete the fields in the dialog box (see Table 4-18).
4. Click **OK**.

Table 4-18. Fields in the Scheduled Event Sets Dialog Box

| Field | Description | Default |
|-------------|---|---------|
| Name | Enter a short identification name for your scheduled event. This name should allow you to differentiate this trigger from other scheduled events. | — |
| Description | Enter a verbose description for the Scheduled Event Set. | — |

4.3.11.2 Editing Scheduled Events

There might be times when you need to edit scheduled events. For example, you may want to change the name or description associated with the scheduled event.

➤ **To edit a scheduled event**

1. From the Settings dialog box, click the **Scheduled Event Sets** tab.

The Scheduled Event Sets tab appears (see Figure 4-32).

2. Click the Scheduled Event Sets you want to edit, and then click the **Edit** button



The Scheduled Event Sets Item dialog box appears (see Figure 4-33).

3. Edit the fields you want to change (see Table 4-18).
4. Click **OK**.

4.3.11.3 Deleting Scheduled Events

If you no longer need a scheduled event, you can delete it.



Note: A precautionary message does not appear before you delete a scheduled event. Therefore, be sure you do not need a scheduled event before you delete it. You cannot undo a scheduled event after it has been deleted.

➤ **To delete scheduled events**

1. From the Settings dialog box, click the **Scheduled Event Sets** tab.

The Scheduled Event Sets tab appears (see Figure 4-32).

2. Click the scheduled event you want to delete.

3. Click the **Del** button



4.3.12 Mode and Log Configuration Settings

The **Modes** tab allows you to configure OpX One modes, program log options, and macro options.

To configure modes and logs

1. In the **Device I/O** tab, click the **Modes / Logs** tab.

The following tab appears.

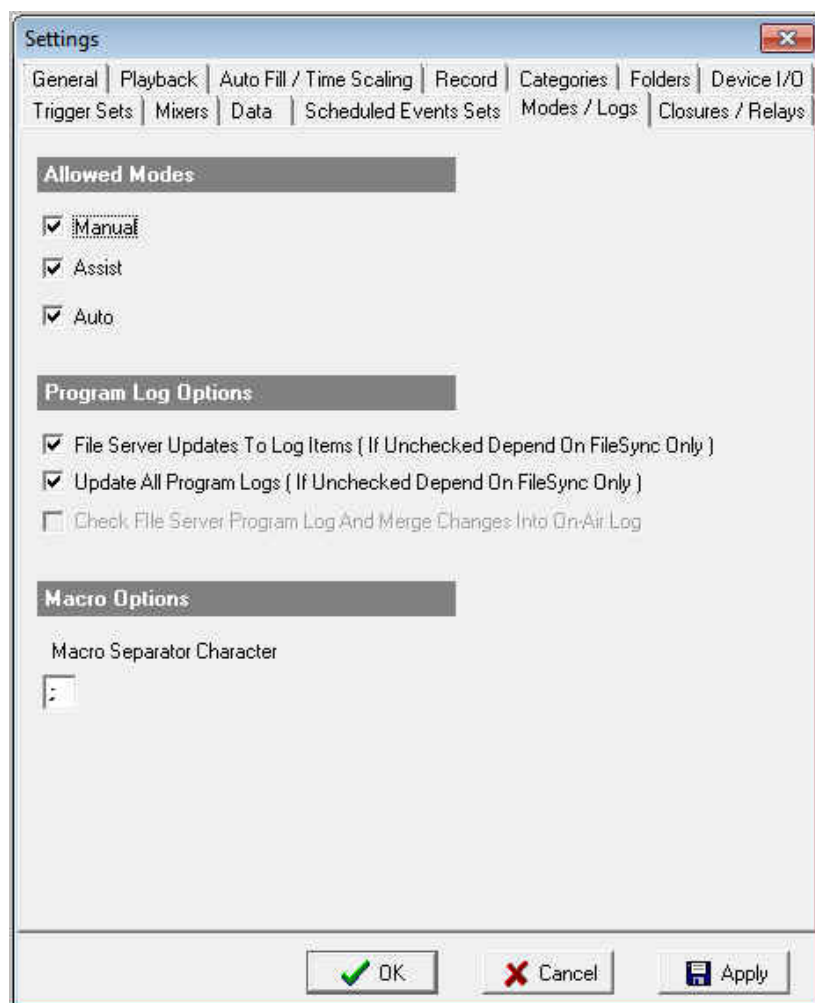


Figure 4-34. Modes / Logs Tab

2. Complete the fields in the tab (see Table 4-19).
3. Click **OK**.

Table 4-19. Fields in the Modes / Logs Tab

| Field | Description | Default |
|---------------------|--|---------|
| Allowed Modes | Designates how each OpX One Audio Server advances through a program log. There are three modes for each Audio Server: manual, assist, and auto. <ul style="list-style-type: none"> Manual mode = the Audio Server steps through the log manually, relying on outside input before advancing. Assist mode = intended for use by live talent. Audio events load from the program log into the Playback Deck Stack, but segues do not execute automatically as they are in auto mode. Events are played by clicking the Start/Start Next button, an individual deck's play button, a timed event, or by a closure (if configured) Auto mode = the Audio Server advances through the log automatically, unless it encounters a command in a log directing it to do otherwise. | Checked |
| Program Log Options | Allows you to configure the following options: <ul style="list-style-type: none"> File Server Updates = when checked, the Audio Server transfers new program logs. Not necessary with FileSync. Update All Program Logs = updates anything in the Logs folder, not just logs that match the program log template. For example, TESTLOG transfers, even though the template is %mm%dd%yy. Check File Server Program Log = moves updates in real-time into the program log. | Checked |
| Macro Options | Allows you to define the character that separates macros. | ; |

4.3.13 Closure and Relay Configuration Settings

The **Closure/Relay** tab allows you to configure the following settings:

- Start deck closures — see section 4.3.13.1.
- Stop deck closures — see section 4.3.13.2.
- Channel on relays — see section 4.3.13.3.
- Channel off relays — see section 4.3.13.4.
- Voicetrack relays — see section 4.3.13.5.

4.3.13.1 Configuring Start Deck Closures

The **Start Deck Closures** tab allows you to configure incoming closures to trigger Deck #1, Deck #2, and Deck #3 to start playing their currently loaded events. This feature is most commonly used with Start buttons on your station's console. The **Ignore Start Closure For** option allows you to set an ignore period for the incoming closure so that an accidental double-press of the button will not cause the deck to play 2 items.

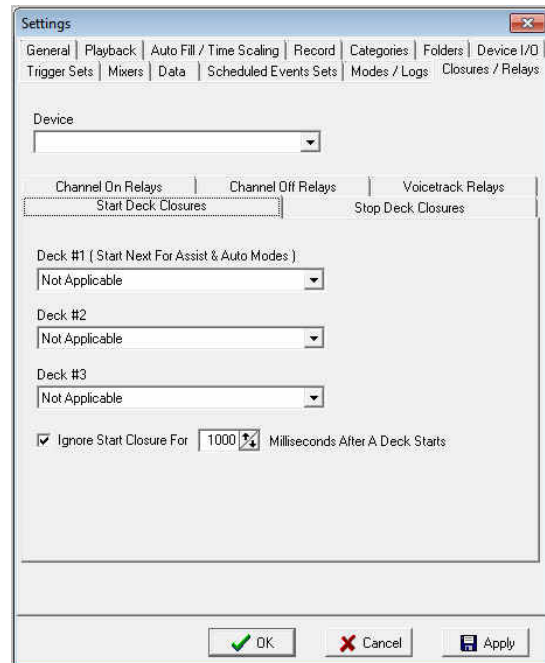


Figure 4-35. Start Deck Closures Tab

4.3.13.2 Configuring Stop Deck Closures

The **Stop Deck Closures** tab allows you to configure incoming closures to trigger Deck #1, Deck #2, and Deck #3 to stop playing their currently playing event

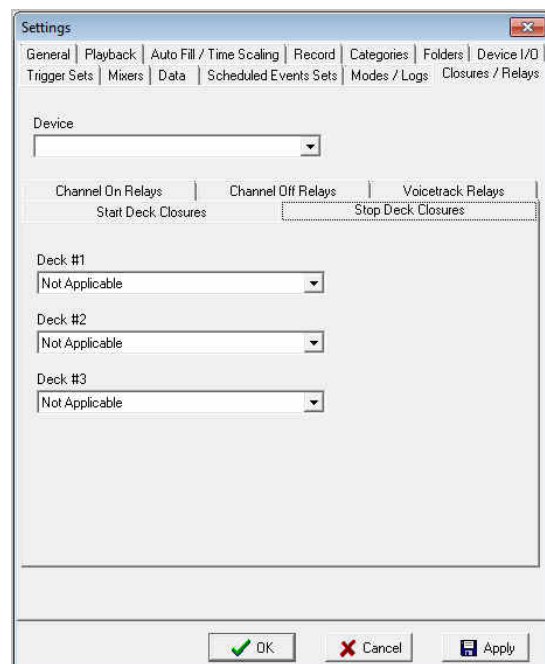


Figure 4-36. Stop Deck

Closures Tab

4.3.13.3 Configuring Channel On Relays

The **Channel On Relays** tab allows you to configure outgoing relay closures to pulse or latch on when Deck #1, Deck #2, or Deck #3 are playing on the Audio Server.

If using **Pulse At Beginning Of Playback** For, specify the duration of the pulse from the **Milliseconds** selector (for a secondary closure when each deck stops, see section 4.3.13.4). Otherwise, to keep the relay latched, select **On For Duration Of Playback**

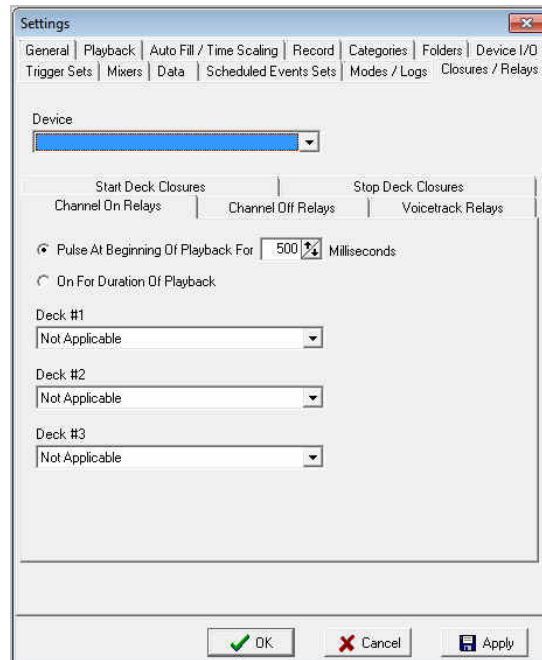


Figure 4-37. Channel On Relays Tab

4.3.13.4 Configuring Channel Off Relays

The **Channel Off Relay** tab settings are used to configure a momentary outgoing relay closure to for Playback Deck #1, Deck#2, or Deck #3 when and will pulse the selected relay when playback is stopped.

The relay options on this tab are used only when the **Pulse At Beginning Of Playback** option on the **Channel On Relays** tab is enabled (see section 4.3.13.3). The pulse length setting for the Channel Off Relays are the same as those configured in the **Millisecond** field on the **Channel On Relays** tab.

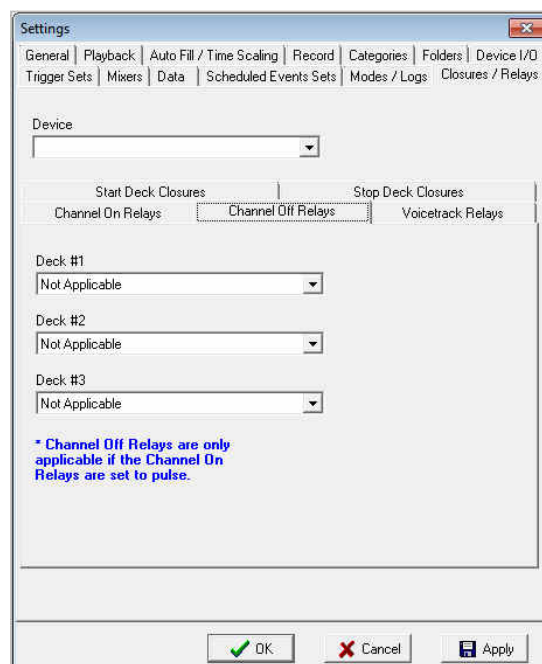


Figure 4-38. Channel Off Relays Tab

4.3.13.5 Configuring Voicetrack Relays

The voicetrack relay function works with BSI Skimmer Plus to enhance your skimming functionality and the validity of what is played on the air.

When a voicetrack is played over the air, the relay chosen in the **Playing Voicetrack Relay** field will be latched closed.

Voicetrack Inhibit Relay is used to have Skimmer Plus ignore its “mic open” closure while the OpX One Studio Client is in the Voicetrack Editor. This prevents Skimmer Plus from recording the creation of your voicetrack before it is completed so that the voicetrack is not recorded as if it was played over the air.



Figure 4-39. Voicetrack Relays Tab

4.4 Loading the Program Log

Clicking **Load Log** on the **File** menu allows you to load a log ad-hoc manually. This is useful when you want to play content that is not part of your scheduled programming, or need to reload or restart a log.

➤ To load the program log

1. On the **File** menu, click **Load Log**.

The Load Program Log dialog box appears.

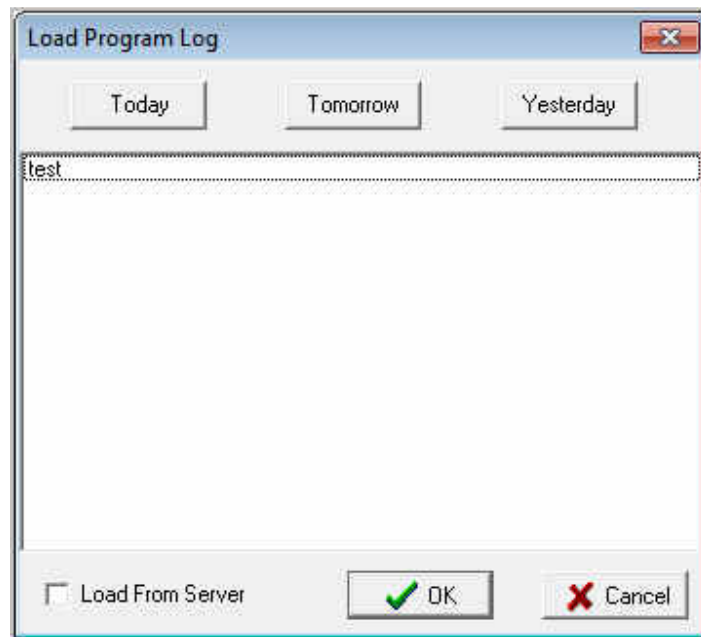


Figure 4-40. Load Program Log Dialog Box

2. Complete the fields in the dialog box (see Table 4-20).
3. Click **OK**.

Table 4-20. Fields in the Load Program Log Dialog Box

| Field | Description | Default |
|--------------------------------|--|-----------|
| Today Tomorrow Yesterday | Automatically loads the log specified for each day based on the "Program Log Name Template" setting in the General tab of the Settings window (see section 4.3.1). Clicking one of the Today, Tomorrow, or Yesterday buttons loads the specified log instantly and closes the dialog box. To select a specific log instead of using the Today, Tomorrow, and Yesterday buttons, click the name of the log in the log list and click OK . If you do not want to load a log, click the Cancel button. | — |
| Load From Server | By default, logs are loaded from the Audio Server's local hard drive. Checking this check box shows the logs stored on your File Server. | Unchecked |

4.5 Adding, Editing, and Deleting Items in the Program Log

The **Edit** menu has **Add**, **Edit**, and **Delete** options for adding, editing, and deleting items in the program log.

4.5.1 Adding Items to the Program Log

Use the **Add** button on the File menu to insert files manually into the currently loaded program log ad-hoc.

➤ **To add an item**

1. In the program log, click the item above where you want to insert the item.
2. On the **Edit** menu, click **Add**.

The Add dialog box appears.

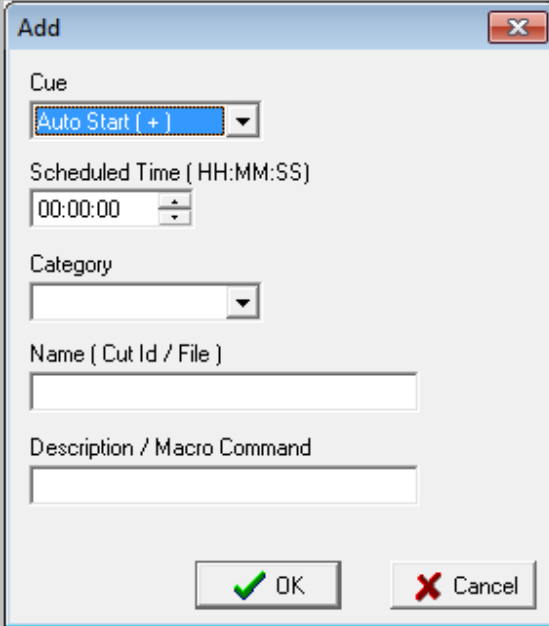
The image shows a Windows-style dialog box titled "Add". It has a standard title bar with a close button (X) in the top right corner. The dialog contains several input fields: a "Cue" dropdown menu with "Auto Start (+)" selected; a "Scheduled Time (HH:MM:SS)" spinner control showing "00:00:00"; a "Category" dropdown menu; a "Name (Cut Id / File)" text input field; and a "Description / Macro Command" text input field. At the bottom right, there are two buttons: "OK" with a green checkmark icon and "Cancel" with a red X icon.

Figure 4-41. Add Dialog Box

3. Complete the fields in the dialog box (see Figure 4-41).
4. Click **OK**.

Table 4-21. Fields in the Add/Edit Dialog Box

| Field | Description | Default |
|-----------------------------|--|----------------|
| Cue | Allows you to set the cue type for the item being inserted. For more information, see Appendix B - Cue Types. | Auto Start (+) |
| Scheduled Time | Set the time the event is scheduled to play. This setting is not required for events with a cue type of Auto Start or Stop because it has no effect on playback, although it is useful to track when your events should play. With Time Immediate and Time Next events, however, the Scheduled Time is required because it determines when OpX One plays the event. Enter the time in HH:MM:SS format (2 digits for the hour, 2 digits for the minutes, and 2 digits for the seconds, each separated by a colon). | 00:00:00 |
| Category | Three types of events can be added: <ul style="list-style-type: none"> • Audio = all Audio files belong to the type 'Audio' (even if they were given a custom category) • Macro • Comment = remarks that can help you track of your log, but do not perform a function. The cue type of a comment does affect the flow of playback; a Stop cue on a comment stops playback, as it would on an audio file. | — |
| Name | Enter the name of the audio file you want to insert. This field is used only by the add function when entering items with "Audio" selected from the Category drop-down list. | — |
| Description / Macro Command | All categories use this field. <ul style="list-style-type: none"> • Audio events = enter the description of what you are entering. • Comments = enter the text of the comment. • Macro = enter the command to be performed (see Appendix A - Macros for information about the available macros and their command structure). | — |

4.5.2 Editing Items in the Program Log

There might be times when you need to edit items in the program log.

➤ To edit an item

1. In the program log, click the item you want to edit.
2. On the **Edit** menu, click **Edit**.

An Edit dialog box similar to the following appears.

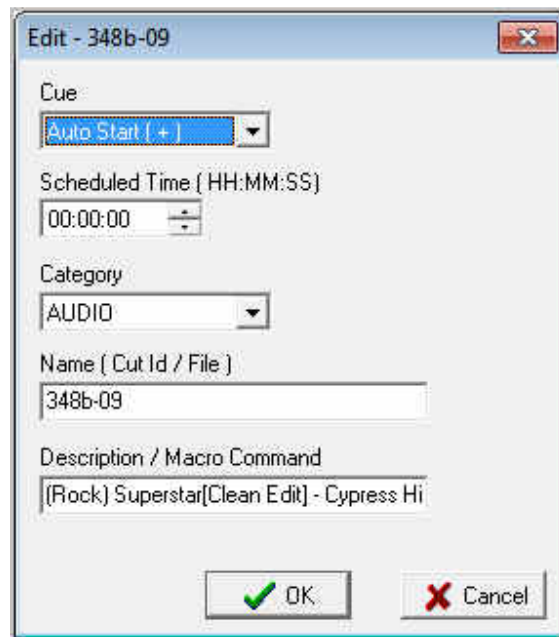


Figure 4-42. Edit Dialog Box

3. Edit the fields you want to change (see

4. Table 4-21).

5. Click **OK**.

4.5.3 Deleting Items from the Program Log

If you no longer need an item in the program log, you can delete the item.



Note: A precautionary message does not appear before you delete an item. Therefore, be sure you do not need the item before you delete it. You cannot undo an item after it has been deleted.

➤ To delete an item

1. In the program log, click the item you want to edit.
2. On the **Edit** menu, click **Delete**.

4.6 Playing Back a Program Log Item


The following procedure describes how to play back an item in the program log.

If the program log is playing when you click the **Start** option or button, playback of the current item continues and the selected item will play back at the highlighted point. To move playback to a new point in the program log from the Audio Server, use the Stop option or button to stop playback, then select the item in the program log at the point where you want to restart playback and click the **Start** option or button.

➤ To play back an item in the program log

1. In the program log, click the item you want to play back.
2. Perform one of the following steps:
 - On the **Action** menu, click **Start**.



- On the tool bar, click 
3. To stop playback, perform one of the following steps:
 - On the **Action** menu, click **Stop**.



- On the tool bar, click

5 Auxiliary Audio Server Module

Topics:

- ^ *Starting the Auxiliary Audio Server Module (page 123)*

This chapter describes the OpX One Auxiliary Audio Server module.

The OpX One Auxiliary Audio Server is an OpX One Audio Server that you can run to perform tasks such as performing background recordings. Performing recordings and other utility tasks in the background removes these tasks from having to be performed by the main Audio Server. The Auxiliary Audio Server has the same functions as the main Audio Server, except that it is not accessible from an OpX One Studio Client.

5.1 Starting the Auxiliary Audio Server Module

You must start the File Server module before you start the Auxiliary Audio Server.

➤ **To start the Auxiliary Audio Server module**

1. Start the File Server module (see section 3.1).
2. Click the Windows Start button and click **Programs > Broadcast Software > AUXILIARYOpX One AudioServer**.

The Auxiliary Audio Server module appears.

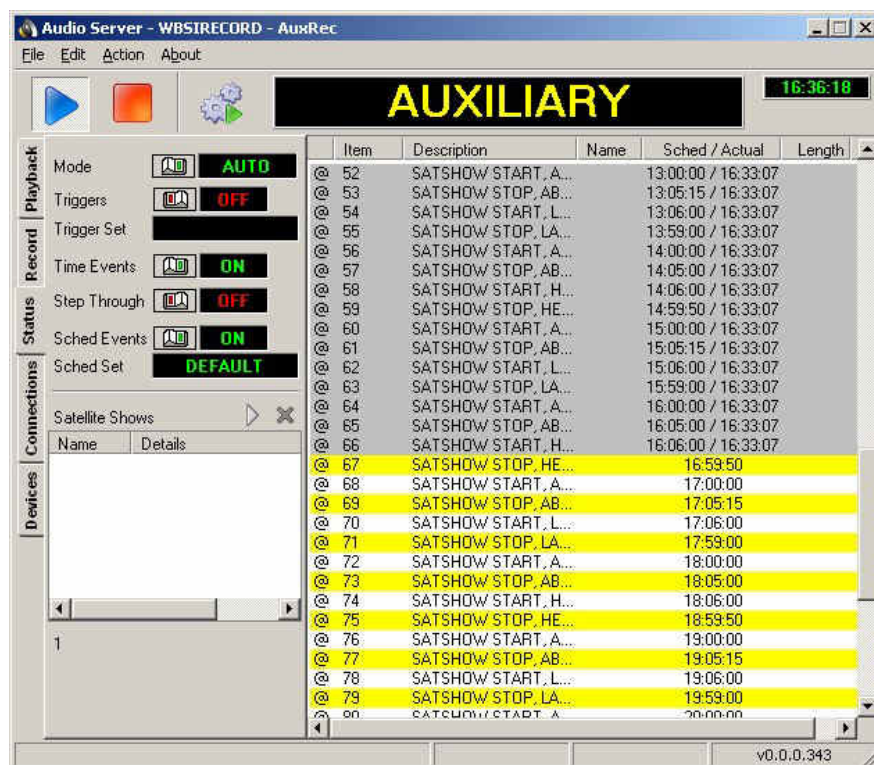


Figure 5-1. Auxiliary Audio Server Module

3. Refer to the equivalent sections in Chapter 4, as the module setup and usage are the same as the Audio Server module.

6 Studio Client Module

Topics:

- ⤴ *Starting the Studio Client Module (page 125)*
- ⤴ *Quick Tour (page 126)*
- ⤴ *Configuring the Studio Client Module (page 134)*
- ⤴ *Operating Modes (page 144)*
- ⤴ *Verifying a Program Log (page 146)*
- ⤴ *Loading a Program Log (page 148)*
- ⤴ *Playing Back a Log (page 150)*
- ⤴ *Editing a Program Log (page 151)*
- ⤴ *Using Hot Keys (page 153)*
- ⤴ *Saving the Hot Key Page to the File Server (page 160)*
- ⤴ *Using the Voicetrack Editor (page 161)*

This chapter describes the OpX One Studio Client module.

The OpX One Studio Client module is the module used in the on-air studio and production studio. The Studio Client module includes the Voicetrack Editor, which allows you to edit voicetracks for the program log currently on the air.

6.1 Starting the Studio Client Module

You must start the File Server module and Audio Server module before you start the Studio Client module.

➤ To start the Studio Client module

1. Start the File Server module (see section 3.1).
2. Click the Windows Start button and click **Programs > Broadcast Software > OpX One Studio Client**.

OpX One searches for stations, and then shows the stations found.

3. Click a station, and then click **Done**.

A Studio Client window similar to the following appears.



6.2 Quick Tour

The following sections provide a quick tour of the Studio Client module interface.



| Number | Description |
|--------|-------------------------------------|
| 1 | Date/time panel. See section 6.2.1. |
| 2 | Station panel. See section 6.2.2. |
| 3 | Hot Key panel. See section 6.2.7. |
| 4 | Navigation bar. See section 6.2.5. |
| 5 | Menu bar. See section 6.2.6. |
| 6 | Program log. See section 6.2.4. |
| 7 | Playback decks. See section 6.2.3. |

6.2.1 Date/Time Panel

The date/time panel shows the current system date and time.



Clicking the **Time** section allows you to toggle between 12-hour and 24-hour display formats.

Clicking the weather information opens a pop-up window that shows current weather and forecast details.

6.2.2 Station Panel

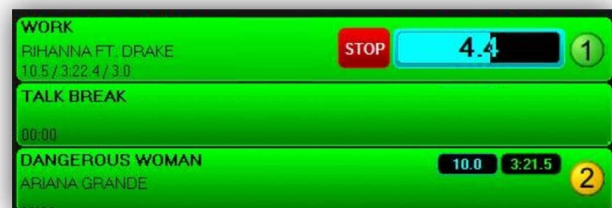
The station panel shows the logo of the station (Audio Server) to which the Studio Client is connected. You can click the station panel to change stations.



Tip: To add a station logo to this panel, save a picture in .jpg format in the Shared Config folder on your file server. Name the file after the station name. In the example above, for instance, the station profile is named “WOPX” and the logo file is named WOPX.jpg.

6.2.3 Playback Decks

The playback deck stack shows the currently playing audio files along with those that are upcoming. As your program log runs, it populates the decks with the audio files to be played.






The three decks in the stack are shown in the example above, with the top-most deck currently playing an audio file. The currently playing audio file always moves to the top of the stack, with the next-to-play audio file second, and third-to-play deck last. This is referred to as a stack because the decks are not in order numerically; instead they are in order by which file is currently playing, then the next to play, and then third to play. When the currently playing deck finishes with its event, it

rotates out of the stack, the next items move up, and a new third-to-play item is added to the bottom of the stack.

When an audio file is playing, you can use the **Stop Button** to stop playback of the deck. The progress meter shows the length remaining of the audio file in text. In the example above, 2 minutes, 39.7 seconds remain) and creates a bar-graph representation in the background.

The color of the text and progress bar depends on the portion of the audio file that is playing:

- Blue = appears during intro.
- Green = appears during the main section.
- Red appears during the segue.

The deck from which the audio file is playing appears at the far right, with a , , or  icon.

6.2.4 Program Log

The program log shows the schedule of events that will be played, including audio files, carts, and macros.




The name of the currently loaded log appears after the Log: tag at the top of the log. If the intended air date of the log is set, it appears after the Air Date: tag.

Except for the first and last columns, the header of the list contains titles for the data type of each column of the program log. Table 6-1 describes each column in the program log.








| Log: 041316 | Air Date: 04/13/2016 | | | |
|-------------|------------------------------|-----------|----------|--|
| 999 | HOT QUICK | HQUICK | 19:35:43 | 0.0 0.0  |
| PLAY | WORK RHANALFT. DRACE | ** 142917 | 19:35:45 | 10.5 3.0  |
| 1001 | TALK BREAK | 15 | 19:39:04 | 0.0  |
| 1002 | DANGEROUS WOMAN | ** 142926 | 19:39:04 | 10.0 1.9  |
| | ARIANA GRANDE | | <3:23.4> | |
| 1003 | HOT QUICK | HQUICK | 19:42:26 | 0.0 0.0  |
| | | | <2.5> | |
| 1004 | NO | ** 142921 | 19:42:28 | 0.0 0.1  |
| | MEGHAN TRAINOR | | <3:25.0> | |
| 1005 | TALK BREAK | 15 | 19:45:52 | 0.0  |
| 1006 | WWW.HOT933HITS.COM | PFLAGS | 19:45:53 | 0.0 0.0  |
| | SIX FLAGS SENIOR NIGHT | | <36.5> | |
| 1007 | COMMERCIALBREAKBEGIN | | 19:46:28 | |
| 1008 | Turner Search Trails (Synth) | 0607 | 19:46:28 | 0.0 0.3  |
| | | | <30.2> | |
| 1009 | T. Moesha (3) | 7036 | 19:46:58 | 0.0 0.2  |
| | WWW.333 | | <1:00.3> | |

Table 6-1. Columns in the Program Log

| Column | Description |
|--------|---|
| Cue | <p>Uses an icon to show the cue type of each program log item:</p> <ul style="list-style-type: none"> • [No Icon] Auto Start = Auto Start cued events have no icon in the Studio Client's program log display. This is equivalent to the + cue the Audio Server shows for Auto Start events. •  Time Immediate = event with a cue type of Time Immediate. This icon is equivalent to the @ cue on the Audio Server. •  Time Next = items with a cue type of Time Next. This icon appears for events designated with the # cue on the Audio Server. •  Stop Cue = audio playback will stop. This icon appears for items with no cue type on the Audio Server. |








Studio Client Module

| Column | Description |
|-------------|---|
| # | Shows the event number of each event in the program log. The first event at the top of the program log is event 1 and each event after that is incremented. This makes it easy to track your location in your log should you exit and re-open OpX One or edit in a production room. The currently playing event displays Play rather than its event number. |
| Description | Shows the Artist and Title data from your audio files and carts. For Macro events or Comments, the specified entry is shown. For quick identification, an icon appears to the right of the description text for common category types: <ul style="list-style-type: none">  = commercials  = music  = cart  = voice track  = macro |
| Name | Shows the physical file name (the name the audio file on the hard drive) of audio events. |
| Time | Shows the time your audio file is scheduled to play. The time can be configured to show the estimated time, scheduled time, or both using the Log Time drop-down list in the General tab of the Studio Client module (see Table 6-5 on page 136). If no time is specified by your traffic or music log-generating software, OpX One estimates when the subsequent files will play based on the currently playing item and the system clock setting. This field changes to a Play button (or a Stop button on the currently playing event) on the highlighted event in the program log. |
| Length | Shows (from left to right) the intro length, total length, and segue length of audio events. Macros and comments do not have an associated length and do not show a length. |
| Deck Number | Uses an icon to show which deck number will be used to play each item. This is useful if you configure your audio server to use separate line outputs to your console for performing manual fades, etc. If you force a re-load of the decks or change the next-to-play item, the playback order in this column is reset and the order can change. |

6.2.5 Navigation Bar

The navigation bar runs along the right side of the program log. It contains the icons in Table 6-2 that simplify navigation in the program log.

Table 6-2. Icons in the Program Log Navigation Bar

| Icon | Icon Name | Description |
|---|---------------------|--|
|  | Page Up | Click to move the program log up one page at a time. |
|  | Event Up | Click to move up one item at a time. |
|  | Current Event | Automatically scrolls the program log to the currently playing event. |
|  | Go To Time | Click to go to a specific time in your program log. A grid appears with a button for each hour of the day. Click the desired hour to go to that portion of your program log. |
|  | Detach Hotkey Panel | If you have two monitors, click to place the Hot Keys to detach the Hot Key Panel from the main user interface and make the panel a separate user-sizable window. |
|  | Event Down | Click to move down one item at a time. |
|  | Page Down | Click to move the program log down one page at a time. |











6.2.6 Menu Bar



The menu bar contains the main function buttons of the user interface. The buttons that appear on the menu bar vary with the operating mode selected using the **Mode** button (the far left button in the figure below, shown set to Auto mode). Table 6-3 describes the buttons in the menu bar.

For more information about operating modes of the Studio Client module, see section 6.4.

Table 6-3. Menu Bar Buttons

| Button | Description |
|---|--|
|  | Use to switch operating modes of the Studio Client module. |
|  | Highlight an item in the program log and click this button to delete the event. |
|  | Highlight an event in the program log, click this button, and then click another location to move the event. |
|  | Highlight an event in the program log, click this button, and then click another location to copy the event. |
|  | Sets the program log to cue mode to preview intros and segues of each audio event. |
|  | To reload the Playback Deck Stack with the currently highlighted event in the Program Log as the next-to-play item, click this button. |
|  | Starts playback or forces a segue to the next event. |
|  | Opens the Event Insert window to add items to the program log or Hot Keys. |
|  | Edits the cross-over length and type for an individual segue, click this button to open the Segue Editor. |
|  | Provides access to various Studio Client options, including voicetracking and loading and saving of logs. |

6.2.7 Hot Key Panel

Hot Keys are “instant-fire” audio files, carts, or macro commands available at the touch of a button. You create Hot Key Sets to organize the Hot Keys available.

The Hot Key Panel has a Hot Key Set loaded with audio files and carts. Clicking any Hot Key plays the specified audio event.

Adding or replacing items is as easy as dragging-and-dropping from the Insert Item window (shown in Figure 6.4) onto the desired Hot Key.

To edit the color, options, or clear a Hot Key right-click a Hot Key and click the corresponding option from the pop-up menu.

To switch between Hot Key Sets, click the **Next** << or **Previous** >> button.

To save Hot Key Sets to your local machine, click the **Save To Server** button. To load a previously saved Hot Key Set from the server, click the **Load From Server** button. To refresh the currently loaded Hot Key Set, click the **Refresh** button. To adjust the number of rows and columns displayed on the Hot Key Panel, click the **Hot Buttons Settings** button.



6.2.8 Insert Panel

The Insert Panel inserts audio events into the program log display and adds audio events to the Hot Keys.

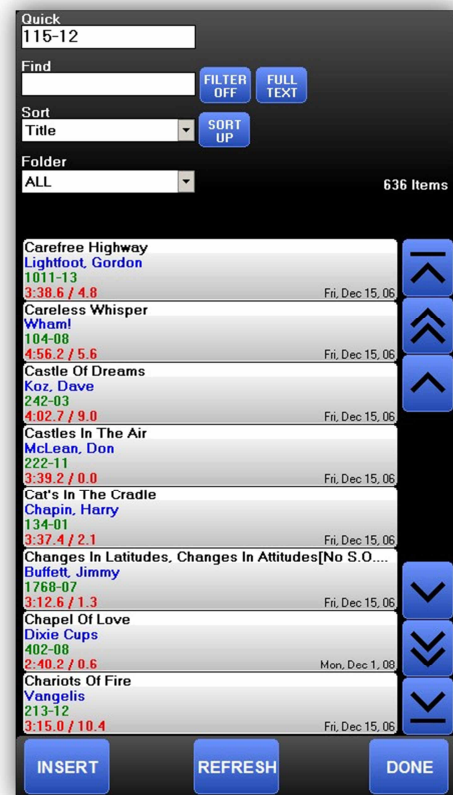
To access the insert panel, click the **Insert** button in the menu bar at the bottom of the Studio Client user interface. The insert panel can be displayed in two locations:

- Superimposed over the top of the Hotkeys Panel.
- Over top of the left side of the program log display.

To switch orientations, click the **Insert** button on the menu bar to toggle between views. The panel switches between the orientations with each click. This allows you to drag audio events into the program log (when the panel is over the Hot Keys) or to the Hot Keys (when the panel overlaps the program log).

The **Quick** field shows the file name of the event you highlighted in the event list. If you know the name of the event you want to insert, enter the file name using your keyboard. After you select and highlight your event, the insert method you use depends on where you place your event:

- To insert an event into the program log, click the **Insert** button. The button will switch its label to **Insert Where?**, at which point you can click on the location in your program log where you want your event placed. The event you click shifts down, along with all subsequent events, and the new event is inserted.
- To add your event to a Hot Key, use your mouse cursor to drag the event from the event list and drop it onto your desired Hot Key.



6.3 Configuring the Studio Client Module

The Studio Client module comes with default configuration settings. Using the **Config** option on the **Options** menu, you can change these settings to suit your requirements. For convenience, the settings are organized in tabs in the Settings window.

➤ To configure the Studio Client module settings

1. On the **Options** menu, click **Config**.

*The Configuration dialog box appears, with the **General** tab displayed.*



2. Complete the fields in the dialog box tabs.

| | |
|---------------------------------------|--|
| General Settings – see section 6.3.1 | Voicetracking settings – see section 6.3.4 |
| Mode settings – see section 6.3.2 | Audition/cue settings – see section 6.3.5 |
| Playback settings – see section 6.3.3 | |

3. When you finish, click **Done**.

6.3.1 General Configuration Settings

The **General** tab contains basic settings for setting up your Studio Client module.

Studio Client Module

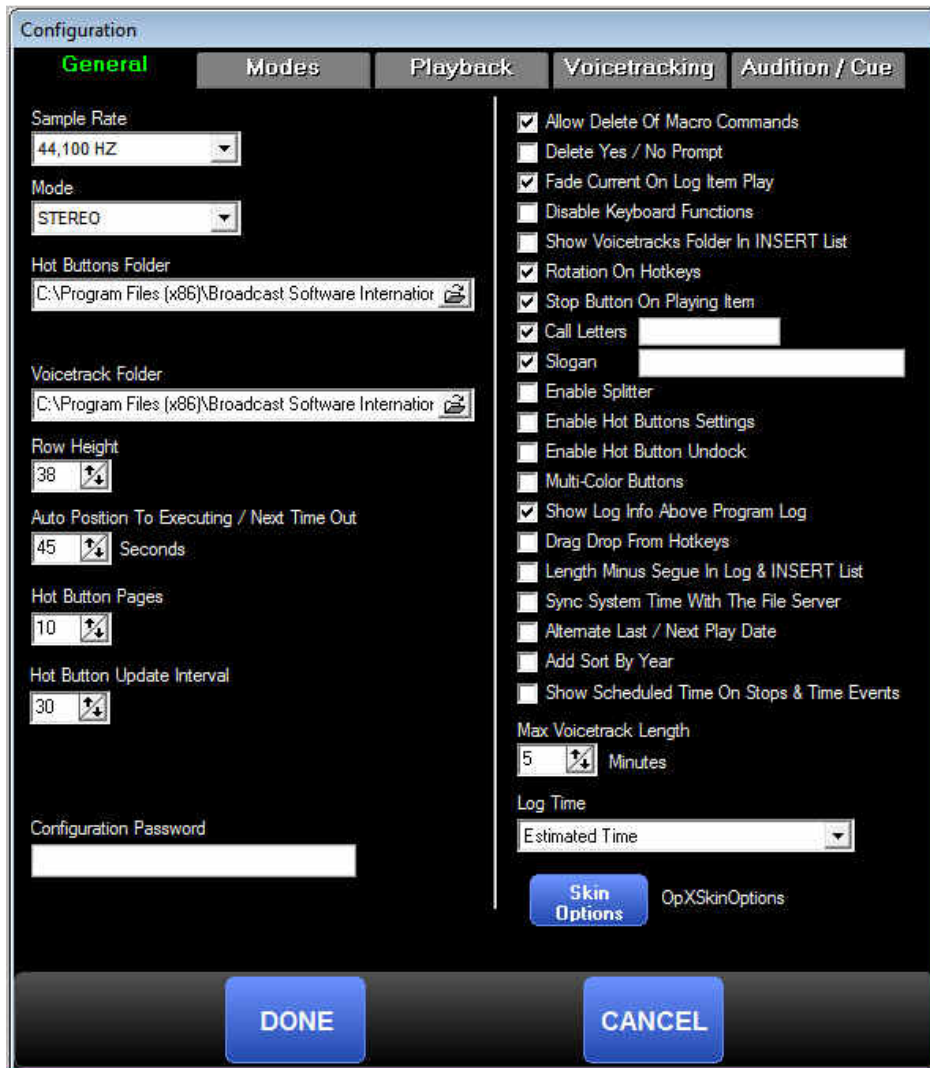


Figure 6-4. General Tab

Table 6-5. Fields in the General Tab

| Field | Description | Default |
|--------------------|---|-------------|
| Sample Rate | Output sample rate for all audio files played by the Studio Client (for example, monitoring voice tracks, intros, segues, and Hot Keys). | 44,100 HZ |
| Mode | Determines whether audio will be stereo or mono (summed) for all audio files played by the Studio Client (for example, monitoring voice tracks, intros, segues, and Hot Keys). | Stereo |
| Hot Buttons Folder | Path where audio files used in Hot Key sets will be cached. | See the tab |
| Voicetrack Folder | Path where voicetrack files, and associated intro and segue audio file portions used to create and edit your voicetracks, will be cached. | See the tab |
| Row Height | Amount of space each line of the program log display is allowed to use. A higher number allows more data to be displayed per event. A lower number allows more events to be displayed at the expense of the amount of data per event that can be shown. | 38 |

Studio Client Module

| Field | Description | Default |
|--|---|-----------|
| Auto Position To Executing/Next Time Out | Number of seconds before the position line reappears on the voicetrack and segue editors. | 45 |
| Hot Button Pages | Maximum number of Hot Key sets that the Hot Key panel will show. A lower number is non-destructive, so setting the maximum page lower than an existing Hot Key set does not delete or destroy the Hot Key sets above the maximum number set. | 10 |
| Hot Button Update interval | Amount of time before the studio client checks for new version of the file associated with the hot button. | 30 |
| Configuration Password | Security password that allows only intended users can access the Configuration window. After a case-sensitive password is entered in this field, a prompt appears when a user tries to go to the Configuration window. | — |
| Allow Delete Of Macro Commands | Allows you to delete macro commands from the Studio Client program log display. | Checked |
| Delete Yes/No Prompt | <ul style="list-style-type: none"> • Checked = a confirmation prompt appears before items are deleted. • Unchecked = a confirmation prompt does not appear before items are deleted. | Unchecked |
| Fade Current On Log Item Play | <ul style="list-style-type: none"> • Checked = currently playing audio event fades out when the log loads and the first event in the newly loaded program log starts to play. • Unchecked = when a new log is loaded, the currently playing event stops playing before the first item in the next log starts. | Checked |
| Disable Keyboard Functions | <ul style="list-style-type: none"> • Checked = disable Studio Client Control + [Key] shortcuts. Normal keyboard usage, such as typing in a name to search, is still possible. This setting is helpful if you accidentally press or bump keys on your keyboard that unintentionally affect playback. • Unchecked = enable Studio Client Control + [Key] shortcuts. | Unchecked |
| Show Voicetracks Folder in INSERT List | <ul style="list-style-type: none"> • Checked = insert previously created voicetrack files into the program log or Hot Keys. • Unchecked = hides the voicetrack folder in the Insert window's Folder drop-down list. | Unchecked |
| Rotation On Hotkeys | <ul style="list-style-type: none"> • Checked = adding an audio event to a Hot Key that has an audio event already associated with it displays a prompt to replace the existing audio event or add it as a rotation. Each time you click the Hot Key, it plays one of the audio events in the rotation. • Unchecked = the added audio event always replaces the one associated with the Hot Key without displaying a prompt. | Checked |
| Stop Button On Playing Item | <ul style="list-style-type: none"> • Checked = currently playing event displays a stop button in the program log display rather than a play button. This setting does not affect the Stop button in the decks on the Playback Deck Stack. • Unchecked = currently playing event displays a play button in the program log display. | Checked |
| Call Letters | <ul style="list-style-type: none"> • Checked = call letters appear to the left of the date/weather information in the Studio Client interface. A field is provided for entering the call letters. • Unchecked = call letters do not appear in the Studio Client user interface. | Checked |
| Slogan | <ul style="list-style-type: none"> • Checked = slogan appears to the left of the date/weather information in the Studio Client interface. A field is provided for entering the slogan. • Unchecked = slogan does not appear in the Studio Client user interface. | Checked |

Studio Client Module

| Field | Description | Default |
|--|--|----------------|
| Enable Splitter | <ul style="list-style-type: none"> • Checked = program log and Hot Key Panel widths can be moved by dragging the splitter bar between them. • Unchecked = program log and Hot Key Panel widths are locked to their current position. | Unchecked |
| Enable Hot Buttons Settings | <ul style="list-style-type: none"> • Checked = number of Hot Key rows and columns can be changed. • Unchecked = number of Hot Key rows and columns is locked. | Unchecked |
| Enable Hot Button Unlock | <ul style="list-style-type: none"> • Checked = Hot Key panel can be unlocked. • Unchecked = Hot Key panel cannot be unlocked. | Unchecked |
| Multi-Color Buttons | <ul style="list-style-type: none"> • Checked = color layout of the Studio Client can be changed. • Unchecked = color layout of the Studio Client cannot be changed. | Unchecked |
| Show Log Info Above Program Log | <ul style="list-style-type: none"> • Checked = shows program log info information, including the name of the program log, at the top of the program log display. • Unchecked = hides program log info information. | Checked |
| Drag Drop From Hotkeys | <ul style="list-style-type: none"> • Checked = items from the currently showing Hot Key Set can be dragged and dropped into the program log. • Unchecked = events cannot be dragged from your Hot Keys to the program log. | Unchecked |
| Length Minus Segue In Log & INSERT List | Track length as calculated at the segue marker, not as calculated from the end of the track. | Unchecked |
| Sync System Time With The File Server | Do not use this check box. | Unchecked |
| Alternate Last/Next Play Date | <ul style="list-style-type: none"> • Checked = last and next play dates are alternated. • Unchecked = last and next play dates are not alternated. | Unchecked |
| Add Sort By Year | Allows you to sort songs by the year they were produced. For example, this feature is useful with classic rock stations. | Unchecked |
| Show Scheduled Time On Stops & Time Events | Time that items are scheduled to run, instead of the estimated time they will play. Timed events can be programmed, so they will hit the scheduled time exactly by using the @ cue type. | Unchecked |
| Max Voicetrack Length | Maximum allowed length of the voicetracks. | 5 |
| Log Time | <ul style="list-style-type: none"> • Estimated Time = time when the system thinks the item will play. • Scheduled Time = scheduled time derived from an external scheduling software application. • Both Estimated & Scheduled Times = estimated and scheduled times. | Estimated Time |
| Skin Options | Allows you to customize the appearance of the Studio Client user interface. For more information, see section 6.12.9. | — |

6.3.2 Mode Configuration Settings

The **Modes** tab allows you to configure the initial and available modes for the Studio Client module.

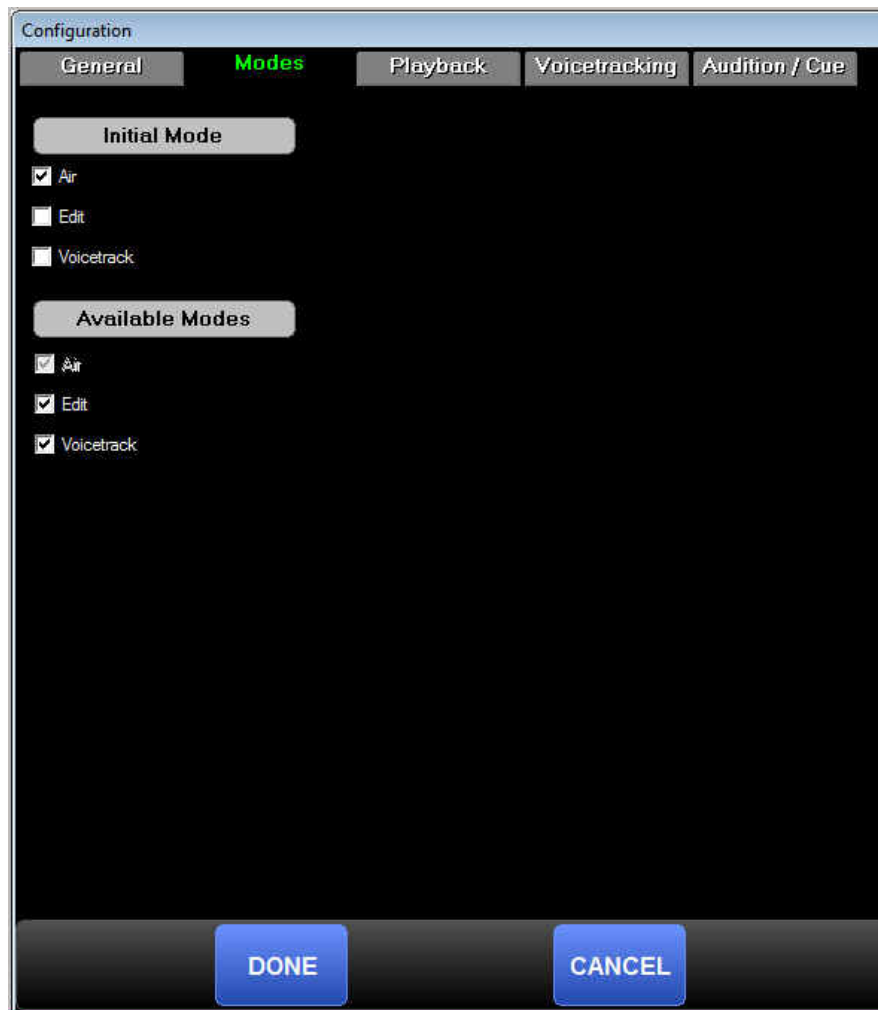


Figure 6-6. Modes Tab

Table 6-7. Fields in the Modes Tab

| Field | Description | Default |
|-----------------|--|---------------------------|
| Initial Mode | Allows you to set the default mode for the Studio Client when you open the Studio Client Module. | Air |
| Available Modes | Uncheck options to disable modes from the Studio Client on your machine. This is useful for production machines that you do not want to potentially allow to control the on-air playback | Air Edit Voicetrack |

6.3.3 Playback Configuration Settings

Hot Keys are one of two types of audio events not played by the Audio Server module (voicetrack editing is the other). The **Playback** tab allows you to select which playback devices the Hot Keys will use. The Studio Client can use three playback devices for Hot Key playback. You can either choose an independent device for each of the three selections, or use the same device for all three.

By default, the left-most column of Hot Keys use Hotkey Playback Device #1, the middle column uses Device #2, and the right column uses Device #3.

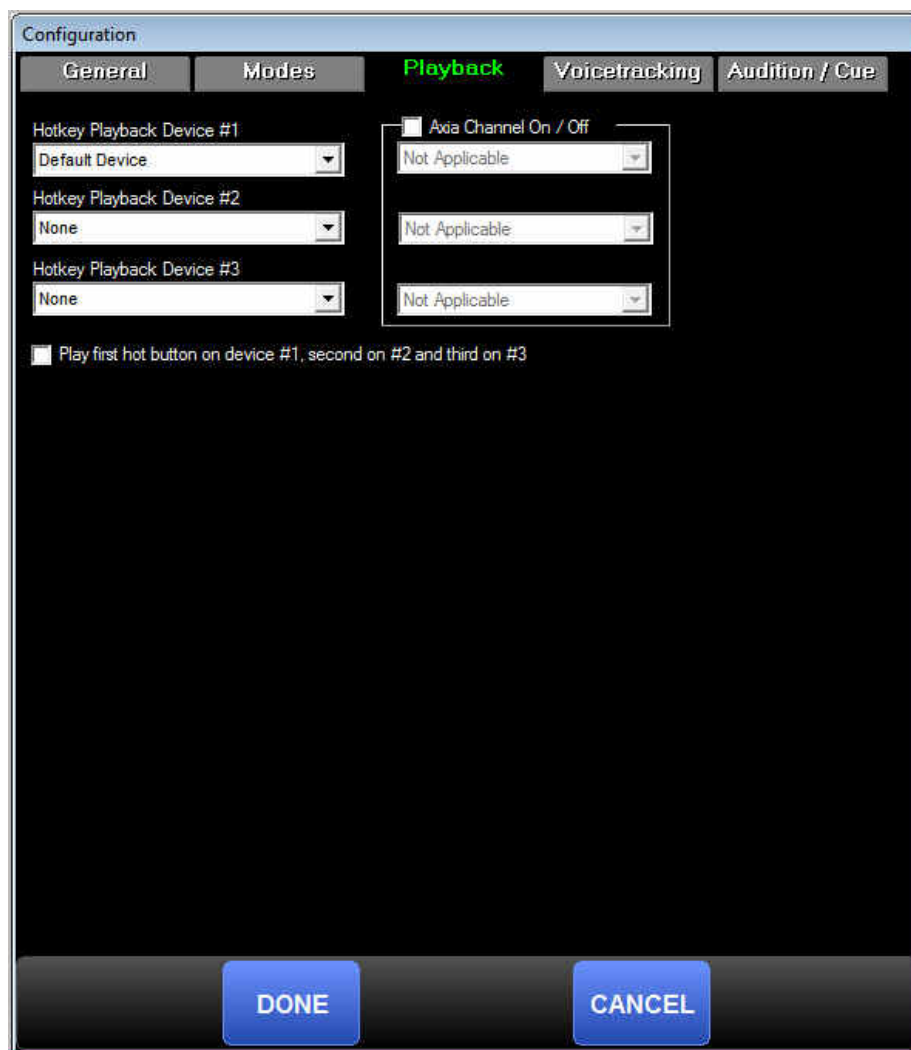


Figure 6-8. Playback Tab

6.3.4 Voicetracking Configuration Settings

The **Voicetracking** tab allows you to configure voicetrack settings.



Figure 6-9. Voicetracking Tab

Studio Client Module

Table 6-10. Fields in the Voicetracking Tab

| Field | Description | Default |
|---------------------------------------|---|------------------|
| Voicetrack Playback Device | Playback device the Voicetrack Editor will use. | See the tab |
| Voicetrack Record Device | Record device the Voicetrack Editor will use. | See the tab |
| Auto Position Playback Cursor | Allows you to choose the default position of playback start. | Checked 3 |
| Cursor Restore Timeout | Number of milliseconds before the cursor reappears after adjusting the start point of the voicetrack or Cut 2. | 1000 |
| Fine Positioning Interval | Number of milliseconds by which each track will be shifted when clicking the advance or recede buttons. | 100 |
| Fine Position Button Repeat Mode | Allows you to enable a repeat function when holding the advance and pull-back buttons and adjust the amount of time between each repeat. | Checked 100 |
| Record Volume | The Voicetrack Editor records at the full volume coming into the audio device being used. Use this field to set a specific record volume other than 100%. | Unchecked 100 |
| Load Voicetrack Cuts With NEXT Button | Used with the voicetrack marker configured in the Import-Merge module's Import Format settings. Importing voicetrack markers into your program log simplifies voicetracking by allowing your talent to click the NEXT button in the Voicetrack Editor to automatically move the Voicetrack Editor to the position in the program log for which they need to record the next voicetrack. | Unchecked |
| Compress Voicetracks | Check to have the system compress the audio. (Instead of using WAV, the system uses the method defined in the file server.) | Unchecked |

6.3.5 Audition/Cue Configuration Settings

If you use the audition/cue function, you can check the Audition check box and configure the following settings.

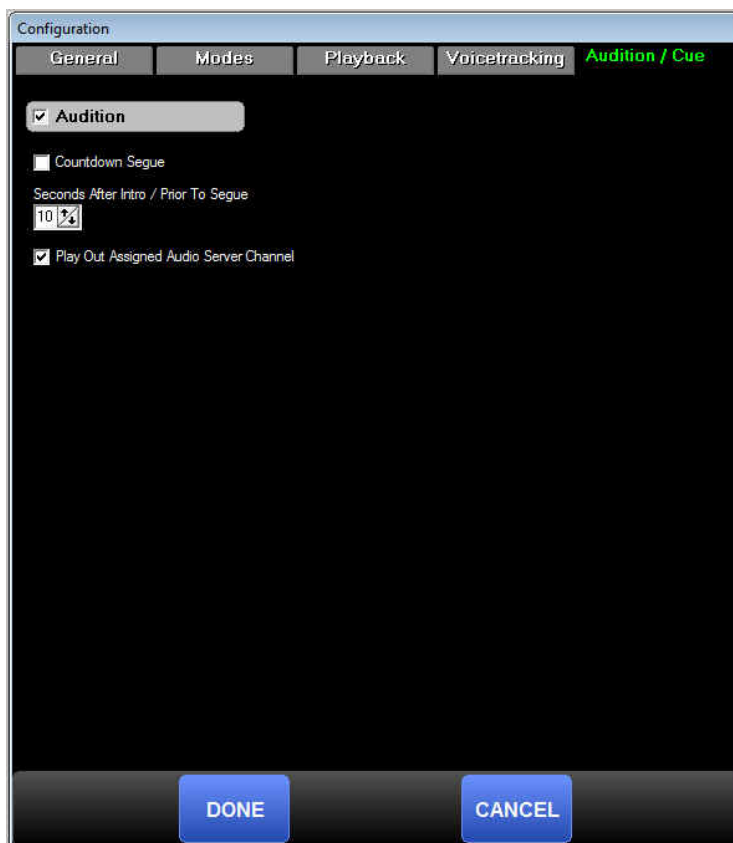


Table 6-11. Audition/Cue Tab

Table 6-12. Fields in the Audition/Cue Tab

| Field | Description | Default |
|--|---|-----------|
| Countdown Segue | <ul style="list-style-type: none"> • Checked = when auditioning the segue, the timer counts down to zero at the segue point, and then restarts the timer and count down through the segue length. • Unchecked = countdown clock counts down the length to the end of the track. | Unchecked |
| Seconds After Intro / Prior To Segue | Starting point of the segue audition. With the default of 10 seconds, the segue audition starts its playback 10 seconds prior to the segue point. For example, a segue point of 13 seconds before the end of a song plays the last 23 seconds of your audio file. | 10 |
| Play Out Assigned Audio Server Channel | Plays the audition channel out of the audition device on the audio server instead of the audition channel on the studio client. | Checked |

6.4 Operating Modes

The Studio Client module has several operating modes that affect the playback of the program log. You select an operating mode by clicking the left button in the tool bar, and then clicking a button from the Pop-up menu.

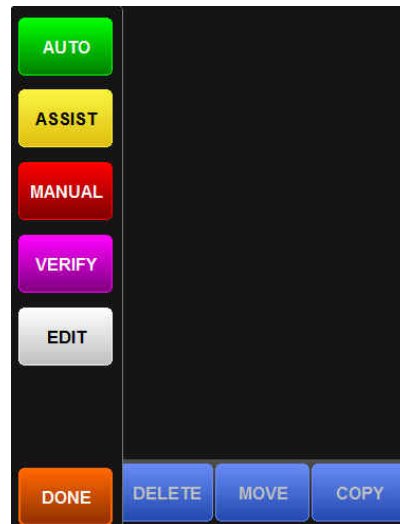







Figure 6-1. Pop-up Menu for Selecting Operating Modes

Table 6-13. Operating Modes

| Button | Mode | Description |
|---|-------------|--|
|  | Auto | Auto mode is the most widely used operating mode. In Auto mode, all cue types are adhered to and full automation is possible. |
|  | Live Assist | Live Assist mode is used by live talent. Audio events load from the program log into the Playback Deck Stack, but segues do not automatically execute, as they are in Auto Mode. Events are played by clicking the Start/Start Next button, an individual deck's play button, a timed event, or they can be started by a closure (if configured). OpX One can respect cues for breaks, so that your entire break can be played as if in Auto mode. This allows your break to play in its entirety without stopping between each break element/commercial/PSA if you configured Audio Server preferences to do so. |
|  | Manual | In Manual mode, no items are automatically placed into the Playback Deck Stack. Instead you click the individual Play button on the desired event in the program log. While in Manual mode, no timed events or Auto Start cued events execute automatically. OpX One can respect cues for breaks, so that your entire break can be played as if in Auto mode. This allows your break to play in its entirety without stopping between each break element/commercial/PSA if you configured Audio Server preferences to do so. |

Studio Client Module

| Button | Mode | Description |
|---|--------|---|
|  | Verify | <p>After importing or creating a Program Log, verify your program log to be sure all the events are valid to be played — that the audio files exist, and that the start and end dates allow the events to be played:</p> <ol style="list-style-type: none"> 1. Click the Mode button, and then click Verify from the Mode menu. 2. When the verification process ends, a window similar to the one in Figure 6-2 appears, with a list of all faults shown in your program log. 3. Go to the position of the errored item by clicking its listing in the error log. 4. When you finish with the report, click Done. |
|  | Edit | <p>Edit mode is the most common mode to enter when working in your production room or on-air studio to add voicetracks and edit logs. It is the only mode you can enter in the Studio Client that allows you to work with OpX One without directly affecting the on-air playback of the Audio Server module for the station to which you are connected.</p> <p>Edit mode allows you to edit a program log other than the one currently being aired or edit the on-air log without affecting the on-the-air playback. When you enter Edit mode, a pop-up window prompts you to select the log you want to edit. Click the log and commence your edits. When you finish, click the Options menu and click Save Log.</p> |

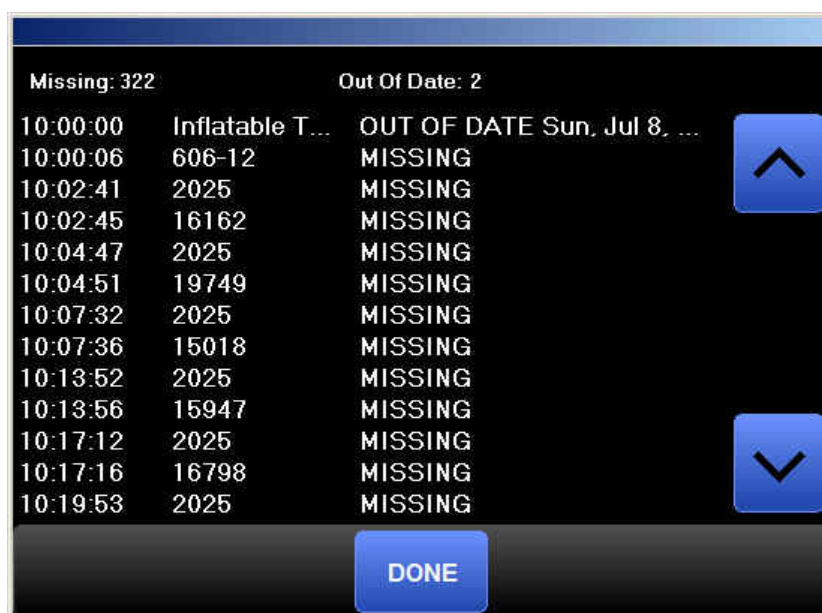


Figure 6-2. Example of Faults in the Program Log

6.5 Verifying a Program Log

After you import or create a program log, verify your program log to be sure all the events are valid to be played — that the audio files exist, and that the start and end dates allow the events to be played.

➤ **To verify a program log**

1. Click the **Mode** button on the menu bar, and then click **Verify**.

At the end of the verification process, a window similar to the one in Figure 6-4 lists all faults in your program log.



Figure 6-3. Clicking Verify from the Mode Button

Missing: 322

Out Of Date: 2

| | | | |
|----------|-----------------|-----------------------------|---|
| 10:00:00 | Inflatable T... | OUT OF DATE Sun, Jul 8, ... | ^ |
| 10:00:06 | 606-12 | MISSING | |
| 10:02:41 | 2025 | MISSING | v |
| 10:02:45 | 16162 | MISSING | |
| 10:04:47 | 2025 | MISSING | |
| 10:04:51 | 19749 | MISSING | |
| 10:07:32 | 2025 | MISSING | |
| 10:07:36 | 15018 | MISSING | |
| 10:13:52 | 2025 | MISSING | |
| 10:13:56 | 15947 | MISSING | |
| 10:17:12 | 2025 | MISSING | |
| 10:17:16 | 16798 | MISSING | |
| 10:19:53 | 2025 | MISSING | |

DONE

Figure 6-4. Example of Errors in Program Log

2. Go to the position of the error by clicking its listing in the error log.
3. Click **Done** when you finish with the report.

6.6 Loading a Program Log

➤ **To load an existing log from the Studio Client module**

1. Click the **Options** menu button on the menu bar, and then click **Load Log** (see Figure 6-5).

The Program Log window appears (see Figure 6-6).



Figure 6-5. Clicking Load Log from the Options Menu

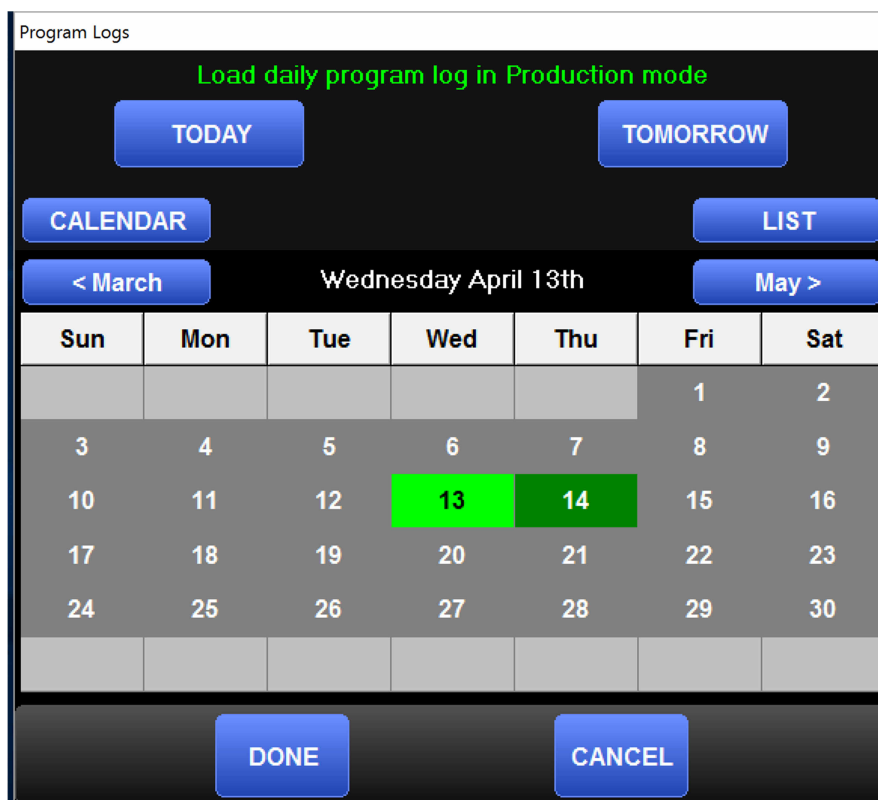


Figure 6-6. Example of Errors in Program Log

2. To load the log specified for today, tomorrow, or yesterday, as determined by the Audio Server's **Program Log Name Template** setting, click the **Today**, **Tomorrow**, or **Yesterday** button.
3. To load a specific log by file name, click the desired program log in the Logs list.
4. When you finish, click the **Done** button.

6.7 Playing Back a Log

In Auto mode, loading a log executes the first event in the log automatically.

In Assist or Manual mode, perform the following procedure to play back a log. You can also use this procedure to start playback at a specific point while in any mode.

➤ To play back a log

1. Click the event you want to play.
2. Click the **Make Next** button, and then click the **Start** or **Start Next** button.

6.8 Editing a Program Log

You can use the Studio Client to edit the currently playing program log while in Auto, Live Assist, or Manual mode. You can also use it to edit a log in Edit mode while the on air program log is playing. The procedure for editing the program log (add events, remove events, move events, or copy events) in any mode is the same.

6.8.1 Adding Events

➤ **To add an event**

1. Click the **Insert** button in the tool bar



The Insert Panel appears.

2. Find the event you want to add to your program log, and then click the **Insert** button on the **Insert** panel. Do not click the **Insert** button on the tool bar.

*The **Insert** button changes to **Insert Where?***

3. Click the location in the program log where you want to place your event.

The event is placed in the location you clicked and the item you clicked in the program log and all items below it shift down.

6.8.2 Removing an Event



Note: A precautionary message does not appear before you remove an event. Therefore, be sure you do not need an event before you remove it. You cannot undo an event after it has been removed from the program list.

➤ To remove an existing event from your program log

1. Click the item to highlight it, and then click the **Delete** button in the tool bar



The item is removed from the program log.

6.8.3 Moving an Event

The following procedure describes how to move an existing event from one location to another location in your program log (for example, how to move a song from before a break to after a break, or switch the order of commercials in a break).

➤ To move an existing event from one location to another location in your program log

1. Click the item you want to move in the program log.
2. Click the **Move** button in the tool bar



*The **Move** button changes to **Move Where?***



3. Click the location in your program log to where you want to move the event.

The event moves to the new location and the events between the old and new locations shift to accommodate the move.



Note: If you decide not to move an event after clicking the **Move** button, click the **Move Where?** button to cancel the move process



6.8.4 Copying an Event

You can copy an event in your program log to another location. This procedure creates a duplicate event at a different point in your program log.

➤ To copy an event

1. Click the event.

2. Click the **Copy** button



The **Copy** button changes to “**Copy Where?**”



3. Click the location in your program log where you want to place the copy of the event.

The duplicate event is added to the location where you clicked in the program log and the event that was at that location, and all subsequent events, shift down.



Note: If you decide not to copy an event after clicking the **Copy** button, click the **Copy Where?** button to cancel the copy process



6.9 Using Hot Keys

Hot Keys are used for instant playback of events. The most common uses of the Hot Keys are for sound effects, jingles, or weather beds for live shows.

Playing a **Hot Key** is as simple as clicking the Hot Key event button or touching the desired event button if you use a touch screen.

Initially, there will be no events in your Hot Keys.



Figure 6-7. Clicking a Hot Key to Play an Event

6.9.1 Adding an Event to a Hot Key

➤ To add an event to a Hot Key

1. Click the **Insert** button in the tool bar two times



The **Insert Panel** opens.

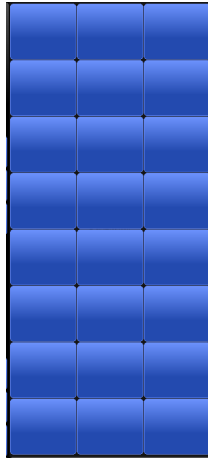


Figure 6-8. Insert Panel

2. In the list of events, find the event you want to add to your Hot Key.
3. Click-and-drag the event from the Insert Panel event list and to the desired Hot Key.

The event is added to the Hot Key.



Figure 6-9. Example of Dragging an Event to a Hot Key

6.9.2 Creating Rotating Hot Keys

If you add an event to a Hot Key that has an event associated with it, you are prompted by one of the following windows, depending on how the **Rotation On Hotkeys** is configured in the Studio Client's configuration settings.

6.9.2.1 Rotation On Hotkeys is Enabled

➤ **If Rotation On Hotkeys is enabled**

1. You are prompted by a window similar to the following:



2. Perform one of the following steps:
 - To add the event to the existing list of rotation events, click the **Add To Rotation** button.
 - To delete the existing list of rotation events and replace it with the newly added event, click the **Replace All** button.
 - To cancel the procedure, click the **Cancel** button.

6.9.2.2 Rotation On Hotkeys is Not Enabled

➤ **If Rotation On Hotkeys is not enabled**

1. You are prompted by a window similar to the following:



2. Perform one of the following steps:

- To replace the existing event with the new one, click the **Yes** button.
- To keep the old event or cancel the procedure, click the **No** button.

6.9.3 Working with Hot Keys

When a Hot Key is set up as a Rotating Hot Key, the Hot Key button adds a caption to the top-right corner that shows which event file will play next and the total number of events in the rotation (see Figure 6-10).

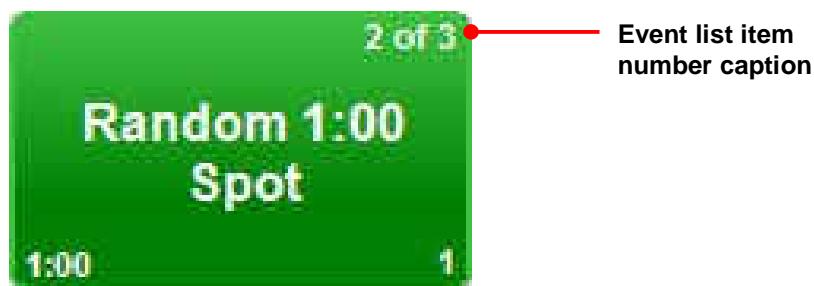


Figure 6-10. Example of a Rotating Hot Key




➤ To view the list of events in the rotation

1. Right click the Hot Key, and then click **List....**

An Event Rotation List window similar to the one in Figure 6-11 appears.



Figure 6-11. Sample Event Rotation List Window

2. To select which event will be the next event to play, highlight the event, or clicking the **Up**  or **Down**  button
3. To remove an event from the list, highlight it and click the **Delete**  button

6.9.4 Setting Hot Key Properties

You can select the color of Hot Key buttons, the button's caption, and which playback device each Hot Key will use.

You can also configure a Hot Key to act as an "Insert" button rather than a playback button. This feature allows you to insert a commonly used event into your program log directly from the Hot Key panel.

➤ To configure Hot Key properties

1. Right-click the Hot Key whose properties you want to set.
2. From the pop-up menu, click **Properties** (see Figure 6-12).

The Properties dialog box appears (see Figure 6-13).

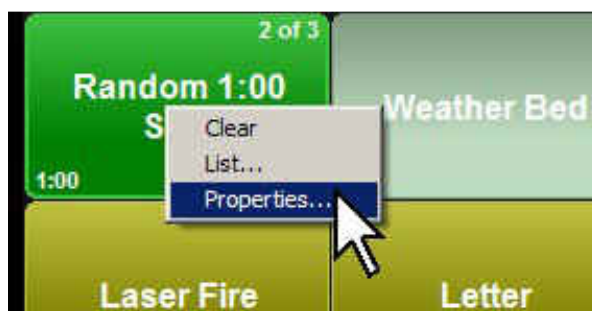


Figure 6-12. Clicking Properties from the Pop-up Window

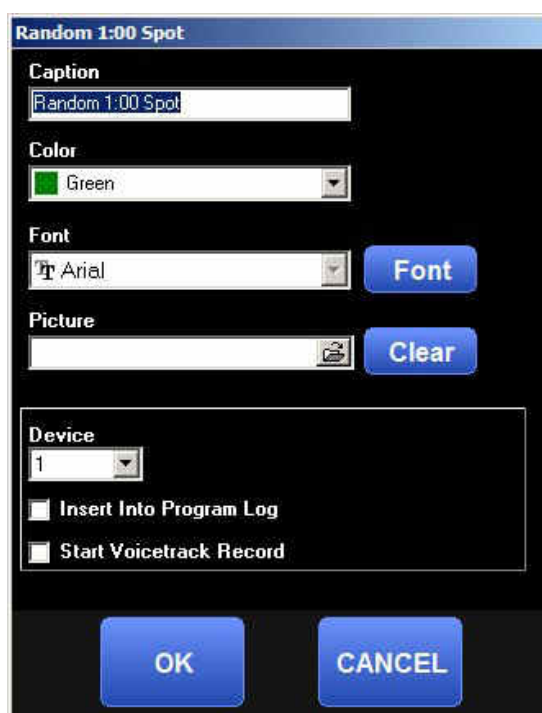


Figure 6-13. Properties Dialog Box

3. Complete fields in the dialog box (see Table 6-14).
4. Click **OK**.

Table 6-14. Fields in the Properties Dialog Box

| Field | Description | Default |
|---------|---|------------------------------|
| Caption | By default, your Hot Key shows the file name of the audio event you've added. To change the caption, change the text in this field. | File name of the audio event |
| Color | Changes the background color of the Hot Key. | Green |
| Font | Changes the font style, size, and color. | Arial |
| Picture | Replaces the Hot Key caption text with a picture. Click the Browse button to select your picture. To remove a picture and return to showing the caption text, click the Clear button. | — |

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| Field | Description | Default |
|-------------------------|--|---------|
| Device | Hot Keys use the audio playback device associated with each column of Hot Key buttons, as configured in the Studio Client's configuration settings. If you want a Hot Key to use a different column's playback device, select it from this drop-down list. | |
| Insert Into Program Log | Changes the operation of the Hot Key without affecting other Hot Keys in your Hot Key Set. Enabling this option changes the behavior of the Hot Key to act as an Insert key. This means that rather than playing an event, as a normal Hot Key does, the Hot Key will allow you to insert the associated event into your program log. When you click an Insert Hot Key, its caption changes to Insert Where? You can then click a location in your program log to insert the Hot Key's event. Use this as a quick shortcut for inserting a commonly used event without having to use the Insert Panel. Insert Hot Keys can be easily identified by the Insert tag added to the top corner of the specific Hot Key (see the Weather Bed Hotkey in Figure 6.2) | |
| Start Voicetrack Record | Enabling this option make a Hot Key to initiate voicetrack recording, enable this option. | |

6.10 Using Hot Key Pages

The previous sections described how to use individual Hot Keys. The following sections describe how to use a Hot Key page.

6.10.1 Navigating Hot Key Pages

- To switching between Hot Key pages



1. Click the **Next** >> or **Previous** << button.

*The counter above the **Refresh** button indicates which Hot Key page is loaded.*

6.11 Saving the Hot Key Page to the File Server

The Hot Key page is saved to your local machine. However, you can save a copy of it to the File Server.



- To save a Hot Key page to the file server

1. Click the Save Page To Server button.

6.11.1 Loading a Hot Key Page from the File Server

- To load a previously saved Hot Key page from the file

1. Click the **Load Page From Server** button.



6.11.2 Refreshing a Hot Key Page

- To refresh the currently loaded Hot Key page

1. Click the **Refresh** button.



6.12 Using the Voicetrack Editor

Voicetracking is the act of pre-recording voiceovers specific to the content of your program log to give your listening audience the impression that your station has live talent on the air. Users produce their voicetracks ahead of the scheduled air time of their program log. It is common to find stations that appear to be staffed 24 hours a day because of content-specific voiceovers that are, in reality, voice tracked by only a couple staff members. Each on-air talent need only spend a couple hours a day recording their voicetracks for 4, 8, or more hour shifts. Some talent can even record full shifts for multiple different stations using voicetracking.

The following sections assume you created a program log and configured the Studio Client settings with appropriate recording and playback audio devices for the Voicetrack Editor. If you produce voicetracks on your on-air workstation, be sure the audio playback device you configured for voicetracking does not go on.

6.12.1 Voicetrack Editor User Interface




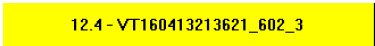



The following figure shows the Voicetrack Editor user interface. The following sections describe the Voicetrack Editor user interface. Table 6-15 describes the key user interface components shown in Figure 6-14.












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Figure 6-14. Voicetrack Editor

Table 6-15. Key Components in the Voicetrack Editor User Interface

| Component | Component Name | Description |
|---|----------------------------------|--|
|  | Start Point Shift Earlier Button | Clicking Cut 2's Shift Earlier button shifts the start time of the second audio file earlier as compared to the end of Cut 1. Clicking voicetrack's Shift Earlier button shifts the start time of the voicetrack and the Cut 2 audio file earlier. |
|  | Go To Cut 1 Button | If you venture elsewhere in the program log while creating voicetracks, clicking this button scrolls the program log display to the Cut 1 audio file loaded in the Voicetrack Editor. |
|  | Cut 1 | The dark green bar represents the first cut of the segue between which you are inserting your voicetrack. The light green section shows the Artist and Title data from the audio file. The dark green section represents the segue portion of the cut and displays that length. |
|  | Voicetrack | The middle yellow bar represents the voicetrack that has been recorded. This bar does not appear until you record your voicetrack, and its width depends on the length of the file recorded. The bar shows the length and filename automatically given to the file. The voicetrack start position can be shifted by clicking on the left or right side of the yellow bar (great for touchscreen users). |
|  | Cut 2 | The lower green bar represents the second cut of the segue that you are inserting your voicetrack between. The light green section shows the Artist and Title data from the audio file. The dark green section represents the intro portion of the cut and displays that length. Cut 2's start position can be shifted by clicking on the left or right side of the green bar (great for touchscreen users). |
|  | Channel Mute Buttons | To temporarily mute audio cuts, click the corresponding Channel Mute buttons. The button's text shows ON when a channel is unmuted or OFF when it is muted. |
|  | Start Point Shift Later Buttons | Clicking Cut 2's Shift Later button shifts the start time of the second audio file later as compared to the end of Cut 1. Clicking Voicetrack's Shift Later button shifts the start time of the voicetrack and the Cut 2 audio file later. |

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| Component | Component Name | Description |
|---|--|--|
|  | Ducking Level Adjust Buttons & Ducking Level Display | Each track, Cut 1, voicetrack, and Cut 2, have adjustment buttons for their ducking levels. Each cut automatically ducks its volume to the percentage chosen while the voicetrack is actively playing. |
|  | Play All Button | Click this button to preview the full voicetrack, including the ducking levels set, the segue of Cut 1, and the intro of Cut 2 as currently set. |
|  | Stop Button | This button is active only while playback or recording is taking place. Click this button to stop playback after clicking the Play All button or to stop recording when creating a Voicetrack. |
|  | Voice Track Button | This button is used when creating your voicetrack. During the creation process this button is used multiple times and acquires different functions as the voice track is recorded: 1. Click to start playback of Cut 1. The button caption changes to RECORD. 2. When Cut 1 is playing, clicking the button a second time starts recording from your microphone and the button caption changes to PLAY CUT2. 3. Clicking once more sets the start point of Cut 2. 4. Click the STOP button to stop recording from your microphone. |
|  | Load Button | Click this button to load the audio event you've highlighted in the Program Log Display into the Cut 1 and the subsequent event into Cut 2. |
|  | Align Button | To quickly reset the start position of the recorded voicetrack and Cut 2 to the segue point of Cut 1, click this button. |
|  | Insert Button | After you finish creating and editing your voicetrack, click this button to insert the voicetrack into your program log. |
|  | Time Scale Display | The length of time selected here determines the length of time represented by the full width of the Voicetrack Editor graphic display. |
|  | Done Button | When you finish creating or editing voicetracks, click this button to exit the Voicetrack Editor. |

6.12.2 Creating Voicetracks

You can perform voicetracking in any mode (Auto, Live Assist, and Manual); more often than not, however, you will perform voicetracking in Edit mode. The Studio Client is set up so that you can edit the voicetracks for the program log loaded on your screen. This means you can edit voicetracks in the currently playing program log while you are in Auto, Live Assist, or Manual mode, or you can edit a completely separate program log from the on-air content using the Studio Client's Edit mode.

➤ To access the Voicetrack Editor

1. Click the **Options** button in the menu bar.
2. Click the **Voice Track** button in the pop-up menu.

The Studio Client displays the Voicetrack Editor at the bottom of the user interface (see Figure 6-14 on page 162).

6.12.3 Loading Audio Events into the Voicetrack Editor

You can load any audio events into the Voicetrack Editor, whether they are music, talk, or other audio content.

➤ To load events into the Voicetrack Editor

1. Highlight the first of the two adjacent tracks in the program log event list between which you want to insert your voicetrack (see Figure 6-15).



Figure 6-15. Highlighting a Track After which a Voicetrack will be Placed

2. Click the **Load** button in the lower left corner of the Voicetrack Editor (see Figure 6-16).

Your two audio events are loaded as Cut 1 and Cut 2 in the Voicetrack Editor, as in Figure 6-14 on page 162.



Figure 6-16. Clicking the Load Button

6.12.4 Recording a Voicetrack

After you load your audio events into the Voicetrack Editor using the previous procedure, you can record your voicetrack. Recording the voicetrack involves multiple presses of a single button to simplify recording your voicetrack.

➤ To record a voicetrack

1. Click the **Voice Track** button (see Figure 6-17).

*Playback of Cut 1 begins and the button toggles to **Record**. As playback progresses, a vertical line moves from left to right to show the progress through the playback of your audio event (see Figure 6-14 on page 162).*



Figure 6-17. Clicking the Voice Track Button

- g. As Cut 1 plays, click the **Record** button at the point you want to start recording from your microphone (see Figure 6-18).

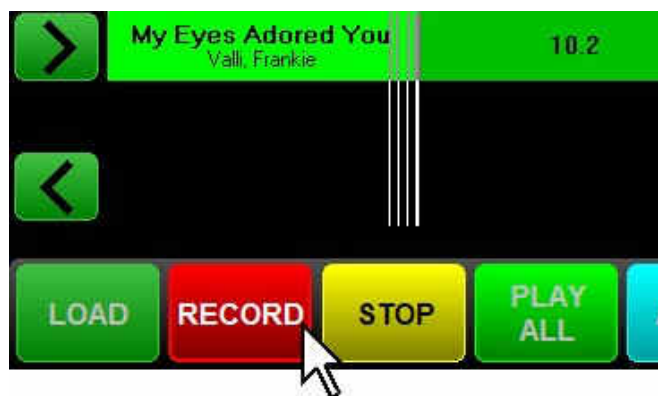


Figure 6-18. Clicking the Record Button

- h. As the voicetrack is being recorded, a yellow bar appears on the track display. The yellow bar, as shown in Figure 6-19 represents the playback position and length of your recorded voicetrack.

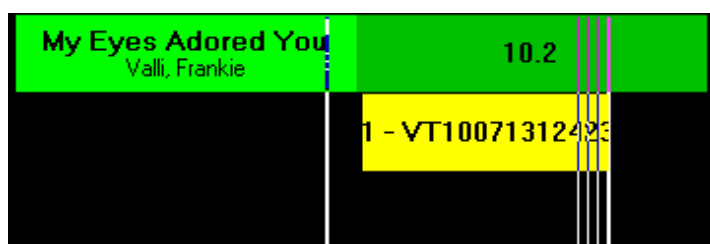


Figure 6-19. Yellow Bar Representing Recorded Audio

- 2. To set the start point of Cut 2, click the **Play Cut 2** button (see Figure 6-20).

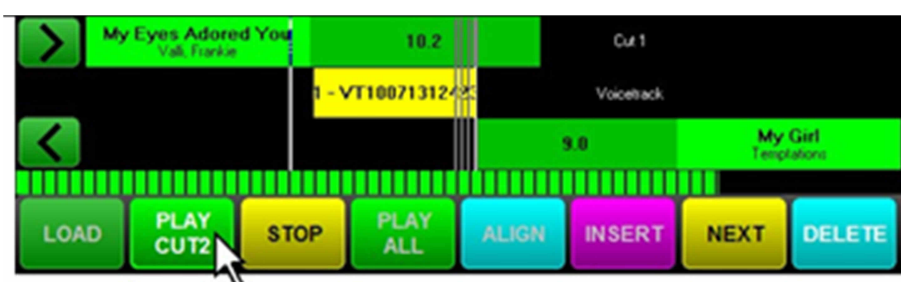


Figure 6-20. Clicking the Play Cut 2 Button

- 3. To end the recording progress, click the **Stop** button (see Figure 6-21).

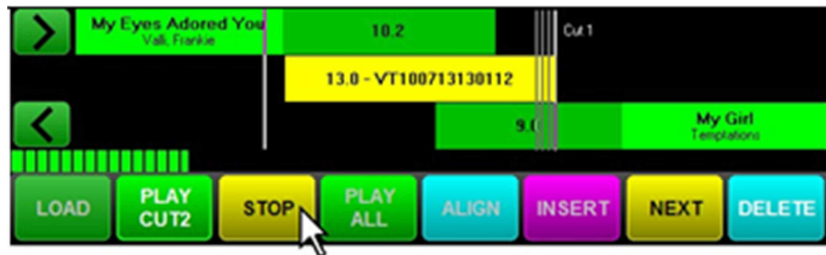


Figure 6-21. Clicking the STOP Button

You have now recorded a voicetrack. To preview it, go to section 6.12.5.

6.12.5 Previewing Your Voicetrack

After you use the procedure in the previous section to record your voicetrack, you can preview your voicetrack.

➤ To hear a preview of your voicetrack

1. Click the **Play All** button (see Figure 6-22).

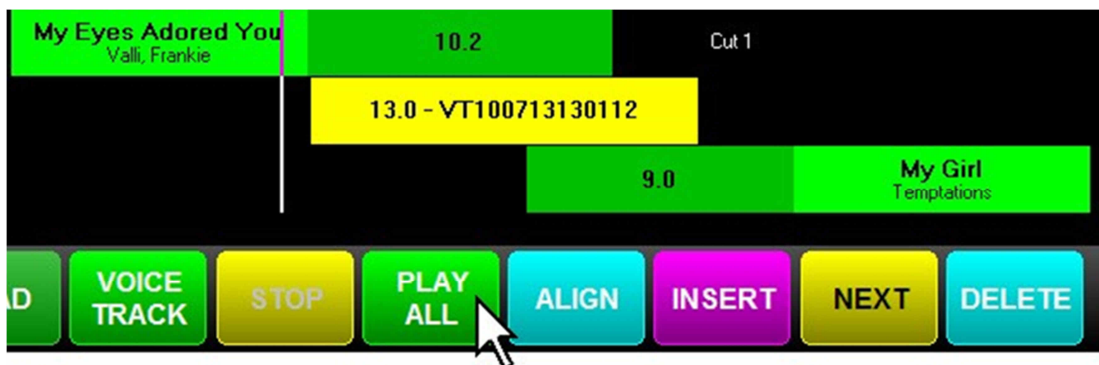


Figure 6-22. Clicking the Play All Button

2. To stop playback, click the **Stop** button.

6.12.6 Adjusting Segue/Start Points

After you preview your voicetrack, you can adjust the start points of the voicetrack audio or Cut 2 if they are not to your liking.

➤ To adjust segue/start points

1. Click the segue or start point, and then drag it to the desired location.



Note: You can also use the **Align** button to adjust segues and start points automatically or use the arrow buttons to adjust segues and start points manually.

6.12.7 Adjusting Ducking Levels

The term “ducking” means: to turn down a portion of overlapping audio to de-emphasize one part (the ducked audio track) and emphasize another (the non-ducked audio track).

You can perform ducking with the Voicetrack Editor independently for each portion of the voicetrack. The ducking effect for all tracks occurs while the voicetrack audio portion is playing. This means that if you set a ducking level on Cut 1, it will not be turned down – or ducked – until the voicetrack audio starts. When ducking is set on Cut 2, it will not return to its normal, non-ducking level until the end of the voicetrack audio is reached.

The voicetrack itself has a ducking level. Since all ducking occurs while the voicetrack audio is playing, this setting is useful for adjusting the overall volume of the voicetrack.



Note: Normally, you should not have to adjust ducking levels. Instead, use the voice track level setting in the Studio Client to set the level at which the voice track is played back and use the ducking level setting in the Audio Server songs to set the level at which songs are ducked.

➤ To adjust the ducking level of Cut 1, the voicetrack, or Cut 2

1. Click the Ducking Level Adjustment buttons next to the Ducking Level Display (see Figure 3-1) to adjust in 5% volume increments.

*The **Ducking Level Adjust Up** button increases the volume of the corresponding track, up to a maximum of 100% of the audio file's actual recorded volume. The **Ducking Level Adjust Down** button decreases the volume of the corresponding track while the voicetrack is playing. You can adjust this a minimum of 5% of its original volume.*

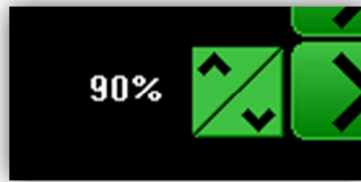


Figure 6-23. Ducking Level Adjustment Buttons with Current Ducking level Set to 90%

6.12.8 Inserting Your Completed Voicetrack into the Program Log


After you create and edit your voicetrack, you can insert the completed voicetrack into the program log.

➤ **To insert the completed voicetrack into the program log**

1. Click the **Insert**  button.

The voicetrack audio file are saved to the OpX One Audio Server and inserted into the program log directly below the currently highlighted item in the program log.



Note: If you inadvertently highlight an item other than the audio event that loaded into the Voicetrack Editor's Cut 1 position, confirm that the Voicetrack Editor's Cut 1 event is the same event highlighted in the program log before you click the Voicetrack Editor **Insert**  button so that you are inserting your voicetrack into the proper location.

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Figure 6-24. Clicking Insert

6.12.9 Customizing the Studio Client Appearance

Since most users of OpX One will spend hours a day using the Studio Client, OpX One allows you to create custom themes (or “skins”) to enhance your experience using the Studio Client.

➤ To change the skin options

1. Click the **Options** button on the main menu bar, and then click **Config**.

The Studio Client’s Configuration window appears.

2. Click the **Skin Options** button in the lower right corner of the **General** tab on the Configuration window (see Figure 6-25).

The Skin Options window appears (see Figure 6-26). The top section of the Skin Options window has buttons for each skin option you can customize.



Figure 6-25. Clicking the Skin Options Button

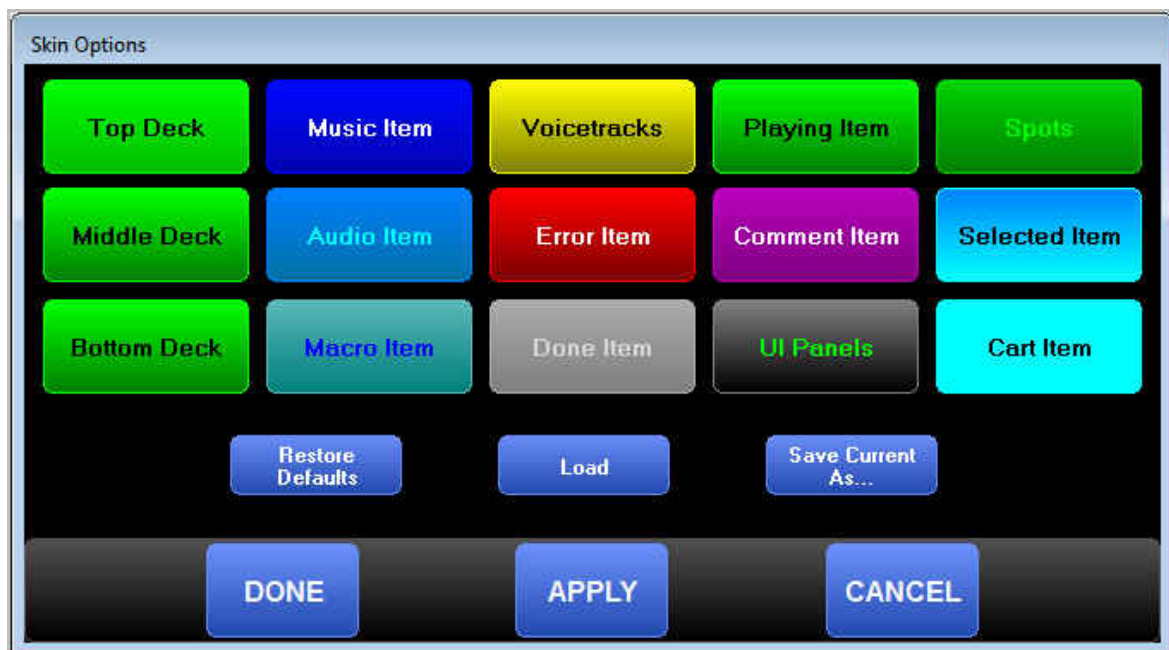


Figure 6-26. Skin Options Window

3. Click a button in the top section.

The Skin Item Option dialog box appears (see Figure 6-27).

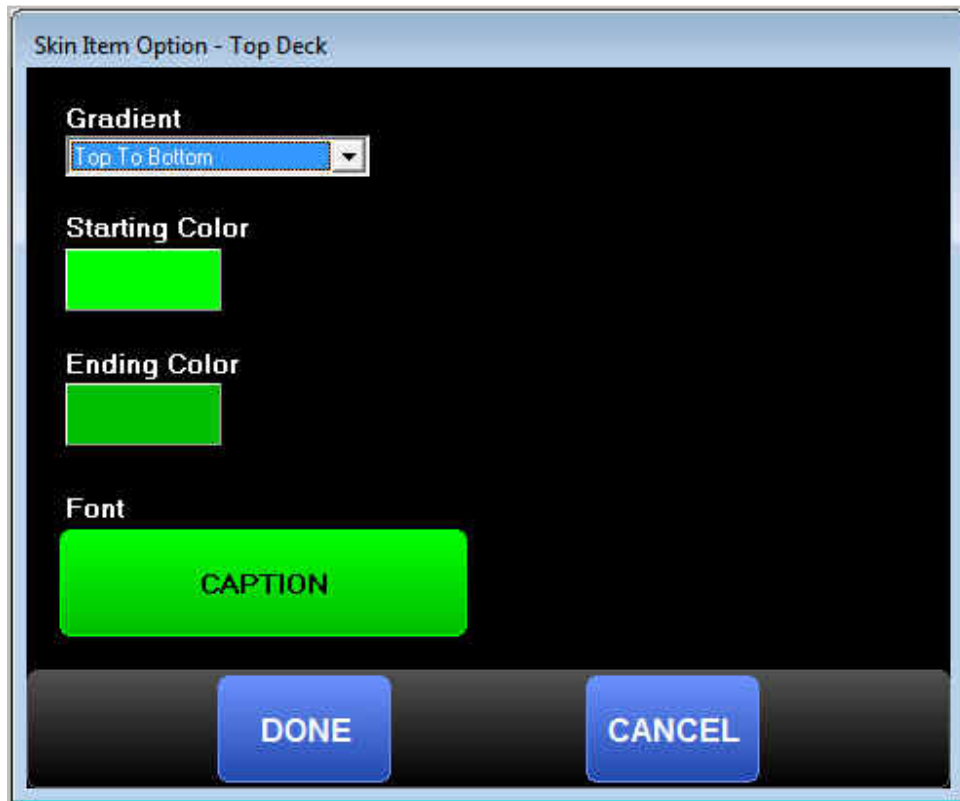


Figure 6-27. Skin Item Option Dialog Box

4. Use this window to edit the skin option as desired (see Table 6-16).

Table 6-16. Fields in the Skin Item Option Dialog Box (Top Section)

| Field | Description | Default |
|----------------|--|---------------|
| Gradient | Most skin items are displayed with a gradient (fading between two colors). This drop-down list allows you to choose the format of the gradient. | Top To Bottom |
| Starting Color | Click the color block to select the top color for your gradient. | — |
| Ending Color | Click this color block to select the ending color for the gradient | — |
| Font | Click the Caption button to display the Font Selection dialog box (see Figure 6-28). Select the font, style, size, and color for your skin option. | — |

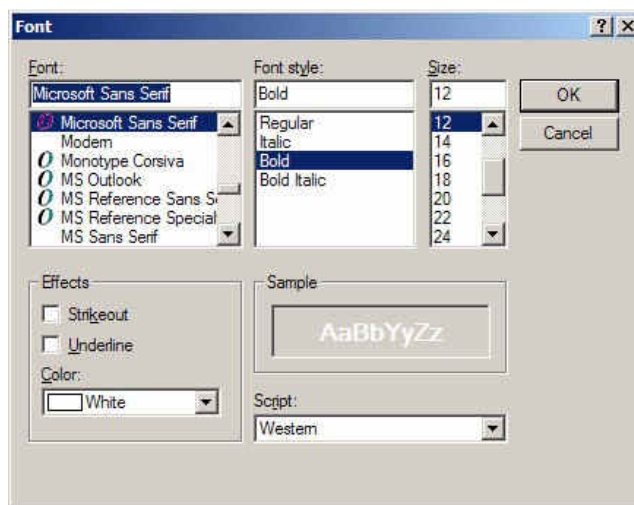


Figure 6-28. Font Selection Dialog Box

5. Use the buttons in the middle section of the Skin Item Option dialog box as appropriate (see Table 6-17).

Table 6-17. Buttons in the Skin Item Option Dialog Box (Middle Section)

| Field | Click This Button to... |
|------------------|---|
| Restore Defaults | Restore all default colors and fonts for your skin. |
| Load | Load a previously saved Skin Item Option Profile. |
| Save Current As | Save your current skin options as a new skin options profile. |

6. When you finish, click the appropriate button at the bottom of the Skin Item Option dialog box (see Table 6-18).

Table 6-18. Buttons in the Skin Item Option Dialog Box (Bottom Section)

| Field | Click This Button to... |
|--------|--|
| Done | Apply any changes you made and close the Skin Item Option dialog box. |
| Apply | Save the changes you made and leave the Skin Item Option dialog box open for you to make further refinements to your skin's settings. |
| Cancel | Close the Skin Item Option dialog box and discard all changes you made since you opened the Skin Item Option dialog box or clicked the Apply button. |

7 File Manager Module

Topics:

- ^ *Starting the File Manager Module (page 175)*
- ^ *Quick Tour (page 176)*
- ^ *Configuring the File Manager Module (page 181)*
- ^ *Transferring Files (page 183)*
- ^ *Working with carts (page 187)*
- ^ *Editing Local Audio File Tagging Info (page 193)*
- ^ *Editing Audio Tagging Info on the File Server (page 196)*
- ^ *Generating and Viewing Automation Reports (page 197)*

This chapter describes the OpX One File Manager module.

The File Manager module shows the files each station has available. It also allows you to transfer your audio files from your production machines into the OpX One File Server, generate reports, and create carts. When you create audio files to put on the air, you use the File Manager module to transfer those audio files into the File Server.



Note: Although you can put audio files directly into the File Server using disks, flash drives, and mapped network drives, we recommend you use the File Manager to perform these tasks. This is because the File Manager communicates directly with the File Server module to notify it of newly added files. Not using the File Manager to copy files delays the recognition of audio files that you add.



Tip: Because the File Manager module does not use mapped drives to communicate with the File Server module, mapped drives are not necessary with the OpX One system. Without mapped drives on the PC running OpX One, you'll have greatly enhanced network security.

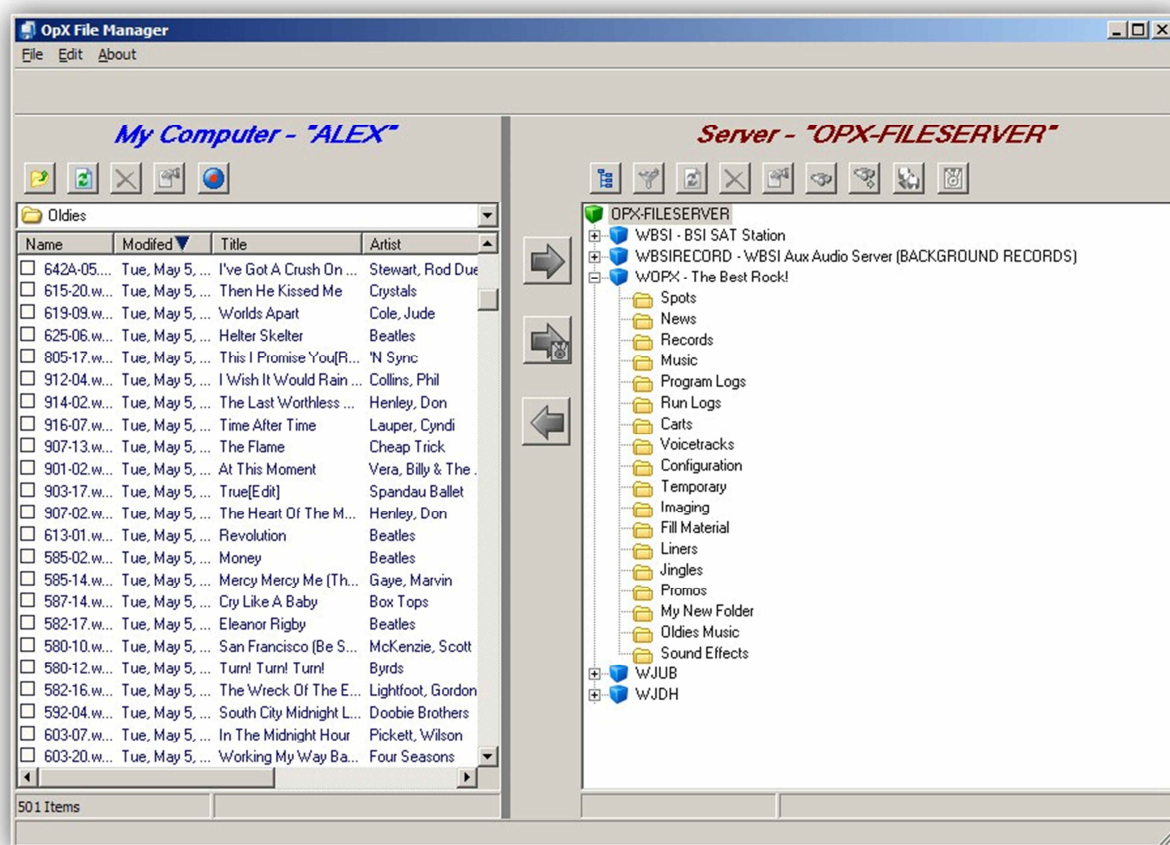
7.1 Starting the File Manager Module

You must start the File Server module before you start the File Manager module.

➤ **To start the File Manager module**

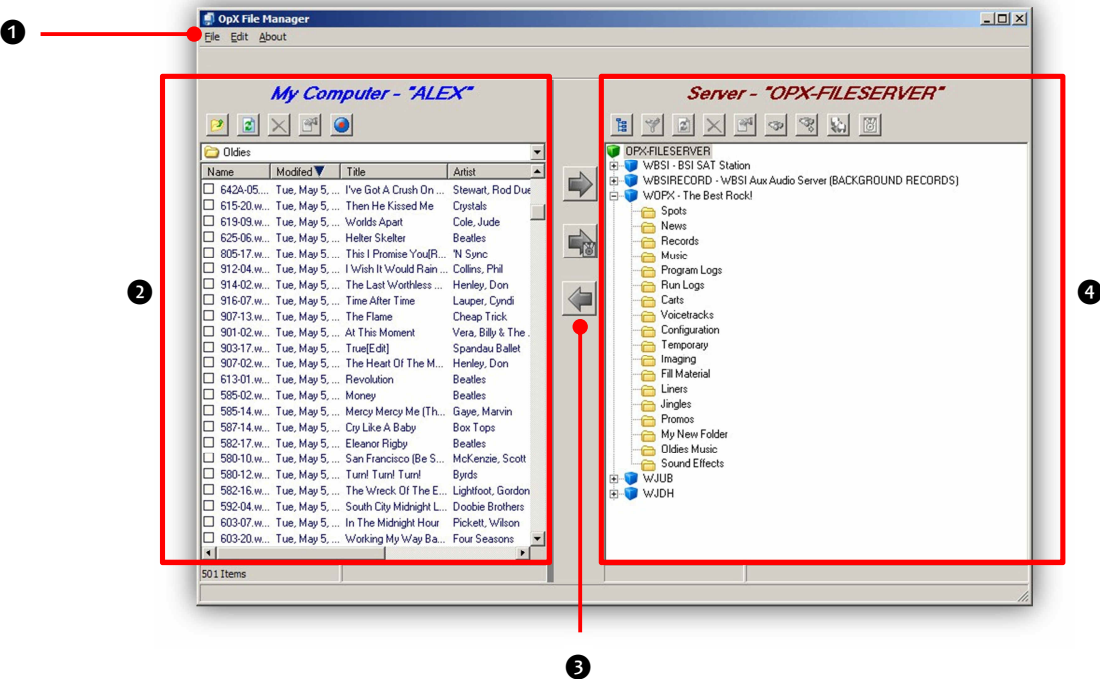
1. Start the File Server module (see section 3.1).
2. Click the Windows Start button and click **Programs > Broadcast Software > OpX One File Manager**.

An OpX One File Manager window similar to the following appears.



7.2 Quick Tour

The following sections provide a quick tour of the File Manager module interface.

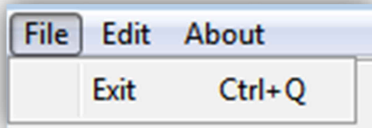


| Number | Description |
|--------|--------------------------------------|
| 1 | Menu bar. See section 7.2.1. |
| 2 | Local file list See section 7.2.2. |
| 3 | Transfer buttons. See section 7.2.4. |
| 4 | Server file list. See section 7.2.3. |

7.2.1 File Manager Module Menu Bar

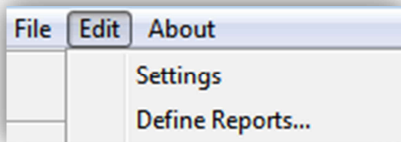
The menu bar appears at the top of the File Manager window. The following sections describe the menus on the menu bar.

7.2.1.1 File Menu



Exit = exits the File Manager Module.

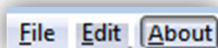
7.2.1.2 Edit Menu



Settings = inserts items manually into the currently loaded program log. See section 7.3.

Define Reports = allows you to create report templates. See section 7.8.1.

7.2.1.3 About Menu



Opens a window that shows the version and build date of the File Manager module you are running. This window also shows the amount of memory and virtual memory being used, and the amount of time that the File Manager module has been running. See Figure 7-1 for an example. To close the window, click **OK**.

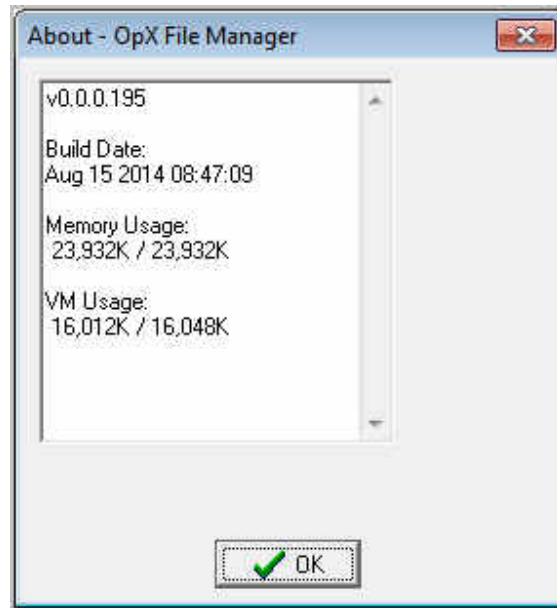


Figure 7-1. Example of About Information






7.2.2 Local File List

The local file list allows you to browse through the drives and folders on your local computer. Use this list to browse the audio files you want to transfer to your OpX One File Server.

The local file list has several icons at the top of the list. Table 7-1 describes these icons.

The local file list also contains a location drop-down list. Clicking this drop-down list shows a list of your drives and the folder you are currently viewing. In Figure 7-2, the **Spots** folder appears at the top of the drop-down list because it is the folder currently displayed.

Table 7-1. Local File List Icons

| Icon | Icon Name | Description |
|---|---------------|--|
|  | Parent Folder | To display the contents of the folder one level above (that is, the parent folder), click this button. |
|  | Refresh | To get the most up-to-date list of files on the local hard drive, click this button to refresh the list of files. |
|  | Delete | To delete the files selected in the local file list, click this button. Files are deleted permanently, so exercise care when deleting files. |
|  | Info Tags | Click this button to open a pop-up window for editing common audio file tags. This feature can be thought of as a trimmed down (or "light") version of the Info Edit module. |
|  | Record | When you need to record a file ASAP while using the File Manager module, click this button to open a pop-up window with a simple record deck. |

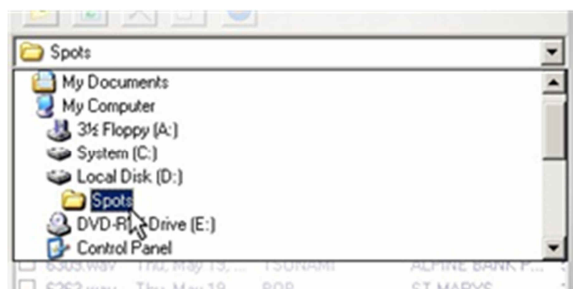


Figure 7-2. Example of Location Drop-Down List

7.2.3 Server File List

To browse the folders for each configured station on your File Server, use the server file list.

The server file list has two display modes:

- Directory Tree mode. You use this mode while browsing the available stations and their subfolders. When you double-click a station's folder, the server file list switches to File List mode, so you can see the files in the station's folders. Figure 7-3 shows an example of Directory Tree mode, with the station's directory tree expanded to show its subfolders.
- File List mode. You use this mode when you are inside a folder.












Figure 7-3. Example of Directory Tree Mode

The server file list contains icons across the top of the list of files. Table 7-2 describes these icons.



File Manager Module


Table 7-2. Server File List Icons

| Icon | Icon Name | Description |
|--|----------------------|--|
|  | Station View | Returns the file list to the 'top level', showing all the stations available. |
|  | Filter | To filter the types of files shown in the server file list, click this button. |
|  | Refresh | To get the most up-to-date list of files on the File Server, click this button to refresh the list of files. |
|  | Delete | To delete the files selected in the server file list, click this button. Files are deleted permanently, so exercise care when deleting files. |
|  | Info Tags | Click this button to open a pop-up window for editing common audio file tags. This feature can be thought of as a trimmed down (or "light") version of the Info Edit module. |
|  | Find | To search for a file by name, click this button. |
|  | Find Next | After using the Find button to find an item, click this button to find the next file using the same search criteria. |
|  | Check For Duplicates | To have OpX One search for files with the same name in other folders for the station you are managing, click this button. |
|  | New Cart | To create a new cart, click this button. When prompted, enter a name for your cart and click the OK button. When the Cart Editor window appears, drag items from the Server's file list on the right side of the File Manager window into the Cart's Event List in the cart editor. The new cart will be saved into the Carts folder of the current station's profile. |

7.2.4 Transfer Buttons

After you find the audio file you want to transfer and the location to where you want to transfer it, click the appropriate transfer button to copy your file.

- The button with the arrow pointing to the right  transfers the file selected in the **Local File List** to the location selected in the server file list.
- The button with the arrow pointing to the left  copies the file selected in the **Server File List** to the location selected in the local file list.

To copy a file from your local drive to your File Server and add it to a cart at the same time, click the **Transfer File To Cart**  button. You are prompted to enter the name of the cart to which you want to add the file.



Note: The arrows will be gray if the **All** folder is selected. Choose an actual station within a folder.

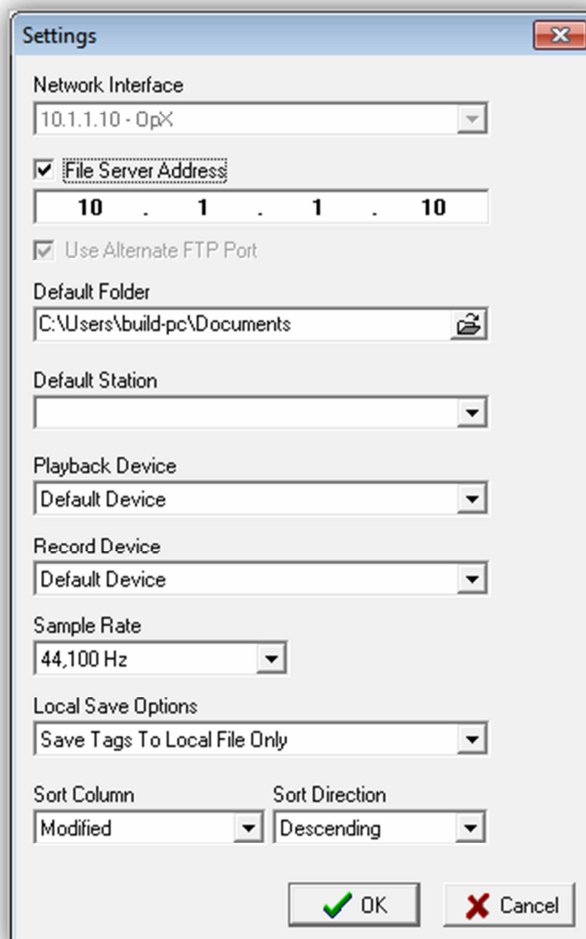
7.3 Configuring the File Manager Module

The File Manager module comes with default configuration settings that should suit most users. Using the **Settings** option on the **Edit** menu, you can change these settings to suit your requirements.

➤ **To configure the File Manager module settings**

1. On the **Edit** menu, click **Settings**.

The Settings dialog box appears.



The screenshot shows the 'Settings' dialog box with the following fields and options:

- Network Interface:** A dropdown menu showing '10.1.1.10 - OpX'.
- File Server Address:** A checked checkbox followed by a text field containing '10 . 1 . 1 . 10'.
- Use Alternate FTP Port:** A checked checkbox.
- Default Folder:** A text field containing 'C:\Users\build-pc\Documents' with a folder icon button to the right.
- Default Station:** A dropdown menu.
- Playback Device:** A dropdown menu showing 'Default Device'.
- Record Device:** A dropdown menu showing 'Default Device'.
- Sample Rate:** A dropdown menu showing '44,100 Hz'.
- Local Save Options:** A dropdown menu showing 'Save Tags To Local File Only'.
- Sort Column:** A dropdown menu showing 'Modified'.
- Sort Direction:** A dropdown menu showing 'Descending'.
- Buttons:** 'OK' (with a green checkmark icon) and 'Cancel' (with a red X icon) buttons at the bottom right.

2. Complete the fields in the dialog box (see Table 7-3).
3. Click **OK**.

File Manager Module

Table 7-3. Fields in the Settings Dialog Box

| Field | Description | Default |
|------------------------|---|------------------------------|
| Network interface | A read-only field that shows the IP address to which the OpX One File Server module is connected. | See the dialog box |
| File Server Address | <ul style="list-style-type: none"> • Checked = enter an IP address of the File Server module to which the File Manager will connect. • Unchecked = shows the IP address of the server to which the File Manager is connected. | Checked |
| Use Alternate FTP Port | Leave at its default setting. | Checked |
| Default Folder | Allows you to set a specific 'home' folder that the File Manager displays automatically in the local file list when the File Manager opens initially. | See the dialog box |
| Default Station | Allows you to select the station that appears when you open the File Server. You can still switch to other stations at will. However, if you spend most of your time working on one of your stations, selecting that station here can save you time. | — |
| Playback Device | Select an audio device that the File Manager uses to preview audio files. The default setting means that the File Manager will use the same audio device Microsoft Windows selected when previewing audio. | Default Device |
| Record Device | Select the device the File Manager uses to record audio with its record deck. The default setting means that the File Manager will use the same audio device Microsoft Windows selected as the recording device. | Default Device |
| Sample Rate | Select the audio sample rate for recording and playback of audio using the File Manager. | 44.100 MHz |
| Local Save Options | Select how the Edit Tags function saves changes to the tags of audio files. | Save Tags To Local File Only |
| Sort Column | Select how files are ordered in the local file list and the server file list. Choices are: <ul style="list-style-type: none"> • Name • Modified (date) • Title • Artist • Length • Start Date • End Date | Modified |
| Sort Direction | Select whether files listed in the local file list and the server file list are ordered in ascending order (0-9, A-Z) or descending order (9-0, Z-A). | Descending |

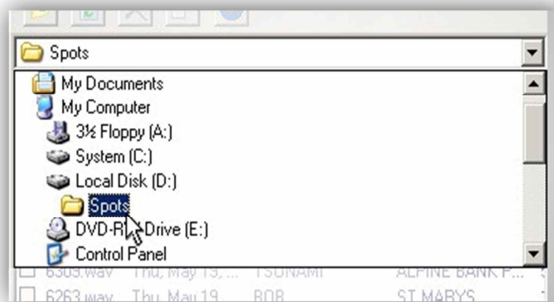
7.4 Transferring Files

You can use the File Manager to transfer files to and from your File Server.

7.4.1 Copying Files to Your File Server


➤ **To copy files to your file server**

1. Using the **Local File List** on the left side of the File Manager, browse to the desired audio file on your local hard drive.



2. Check each audio file you want to transfer.



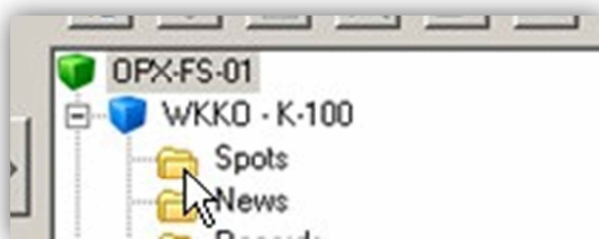
3. Click the plus  button to expand the list of folders for the station to which you want to copy your audio files.

File Manager Module

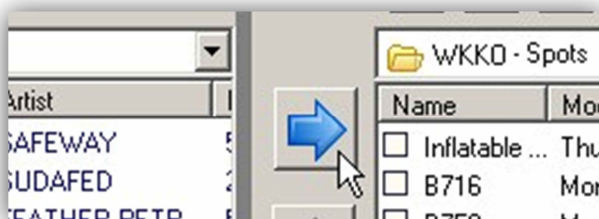


Note: You can choose a valid file (44.1khz 16 bit Windows PCM wave) only. If there is no check box to select the cut, double-check the format and sample rate.

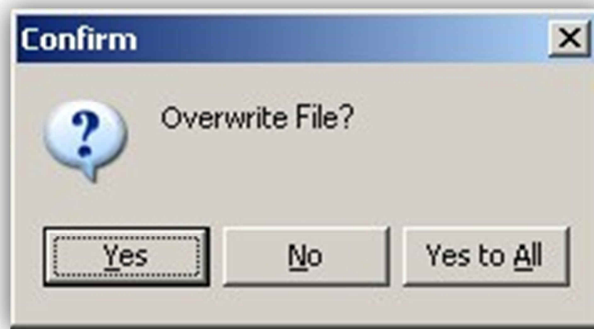
- Click the subfolder of the station to display its contents.



- Click the right-pointing **File Transfer** button to start copying.



- If the File Manager finds files with the same name on the server, a message asks whether you want to keep or overwrite the file. Click **Yes** (or **Yes to All** in the case of multiple files) to overwrite or **No** to not overwrite.



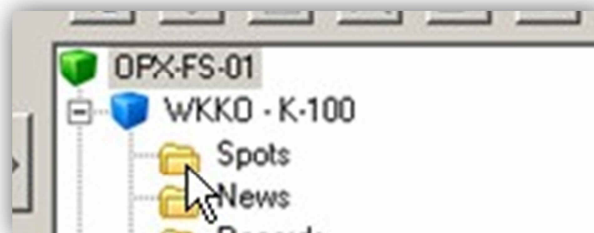
7. When the transfer completes, click the **Done** button.



7.4.2 Copying Files from Your File Server

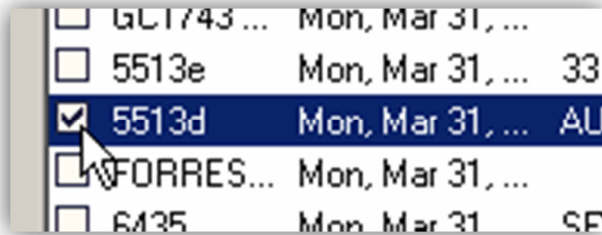
➤ To copy files from your file server

1. Using the **Server File List** on the right side of the File Manager, browse to the desired audio file.

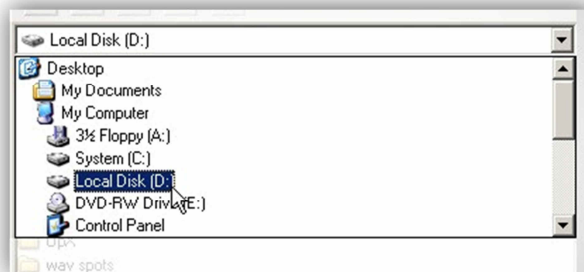


2. Check each audio file you want to transfer.

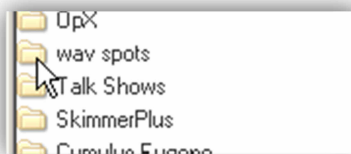
File Manager Module



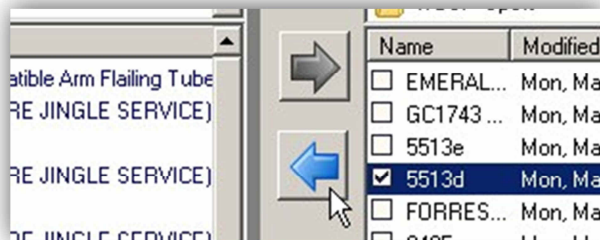
- Using the Location drop down on the **Local File List**, click the drive to which you want like to copy the files.



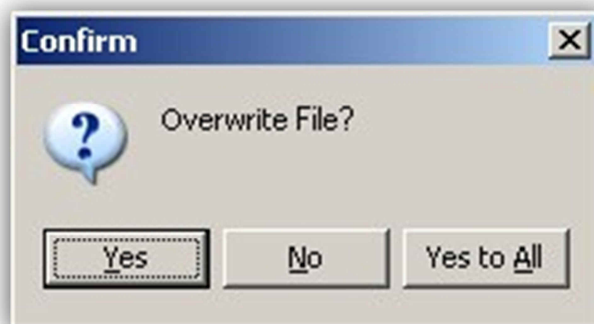
- Browse to the folder to where you want to transfer the server's file.



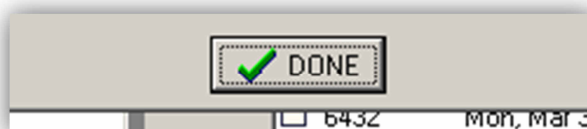
- Click the left-pointing **File Transfer** button to start copying.



- If the File Manager finds files with the same name on the server, a message asks whether you want to keep or overwrite the file. Click **Yes** (or **Yes to All** in the case of multiple files) to overwrite or **No** not to overwrite.



7. When the transfer completes, click the **Done** button.



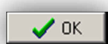
7.5 Working with carts

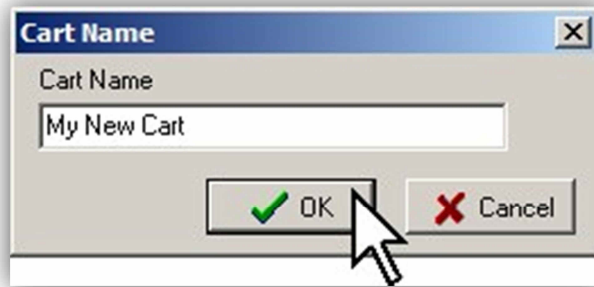
7.5.1 Creating a New Cart

➤ **To create a new cart**

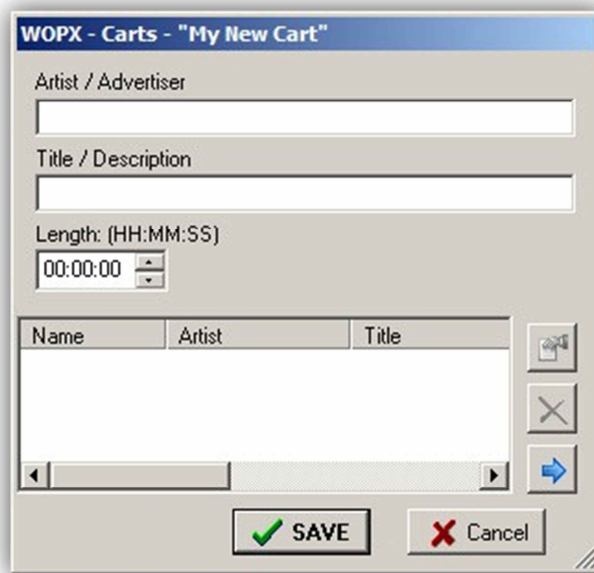
1. At the top of the File Server List, click the **New Cart** button 





The Cart Name dialog box appears.

2. Enter a new name for your cart, and then click the **OK**  button.



The Cart Editor dialog box appears.



3. Complete the fields in the dialog box (see Table 7-4).
4. To add items to the cart editor's event list, find items in your station's audio folders in the File Manager's server file list and drag and drop them into the cart editor's event list.
5. After you have events in your cart's event list, you can edit an event's tag info by clicking the **Edit Tags**  button.
6. To remove events from the cart's event list, click the  **Delete** button.
7. To set the next-to-play item in the cart, highlight the desired event in the cart's event list and click the **Make Next**  button.
8. When you finish creating your cart, click  **Save**.

File Manager Module

Table 7-4. Fields in the Cart Editor Dialog Box

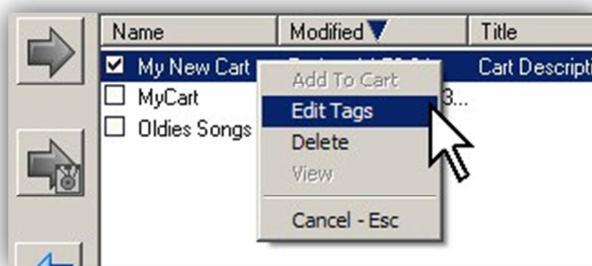
| Field | Description | Default |
|-------------------|---|----------|
| Artist/Advertiser | Enter an artist or advertiser that describes the contents of your cart. | — |
| Title/Description | Enter a title or description about the contents of your cart. | — |
| Length | Enter an average length of the items that will be in your cart. | 00:00:00 |

7.5.2 Using the Cart Editor to Edit a Cart

Using the Cart Editor, you can edit the contents of an existing cart, including adding new files, removing events from the event list, or modifying the Artist/Advertiser and Title/Description tags.

➤ **To edit a cart**

1. Browse to your desired cart file in the server file list.
2. Right-click the cart file, and then click **Edit Tags**.



The Cart Editor window appears.

File Manager Module



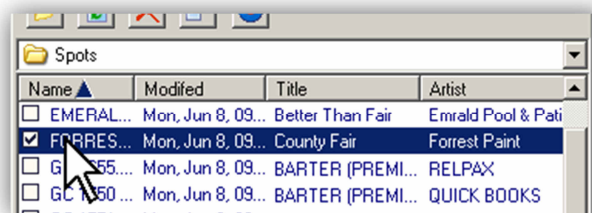
3. Edit the files as desired
4. When you finish, click **Save**.

7.5.3 Adding Local Files Directly to Carts

➤ To add local files directly to carts

1. In the local file list (the left list in the File Manager), highlight the audio file you want to add to a cart on the file server.

A check mark appears next to the item.



2. On the server file list (the right list in the File Manager), browse to the folder where you want to store the actual audio file (not the location of the cart).

File Manager Module



3. Click the **Add To Cart** button.



The Cart Names dialog box appears.



4. Enter the name of the carts to which you want to add audio files.

If you selected a shared folder, the Cart Name dialog in Figure 7-4 appears. Otherwise, the Cart Name dialog box in Figure 7-5 appears.

File Manager Module



Figure 7-4. Cart Name When Selecting a Shared Folder

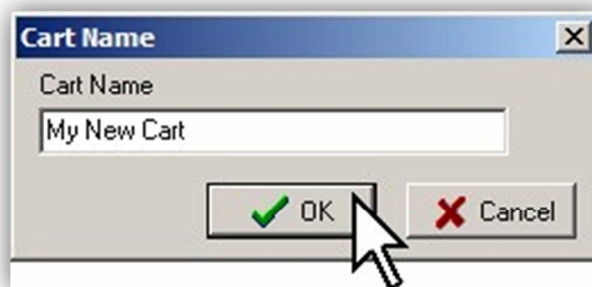
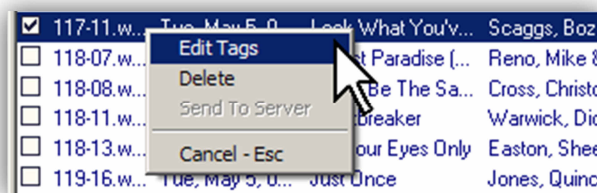


Figure 7-5. Cart Name When Selecting a Non-shared Folder

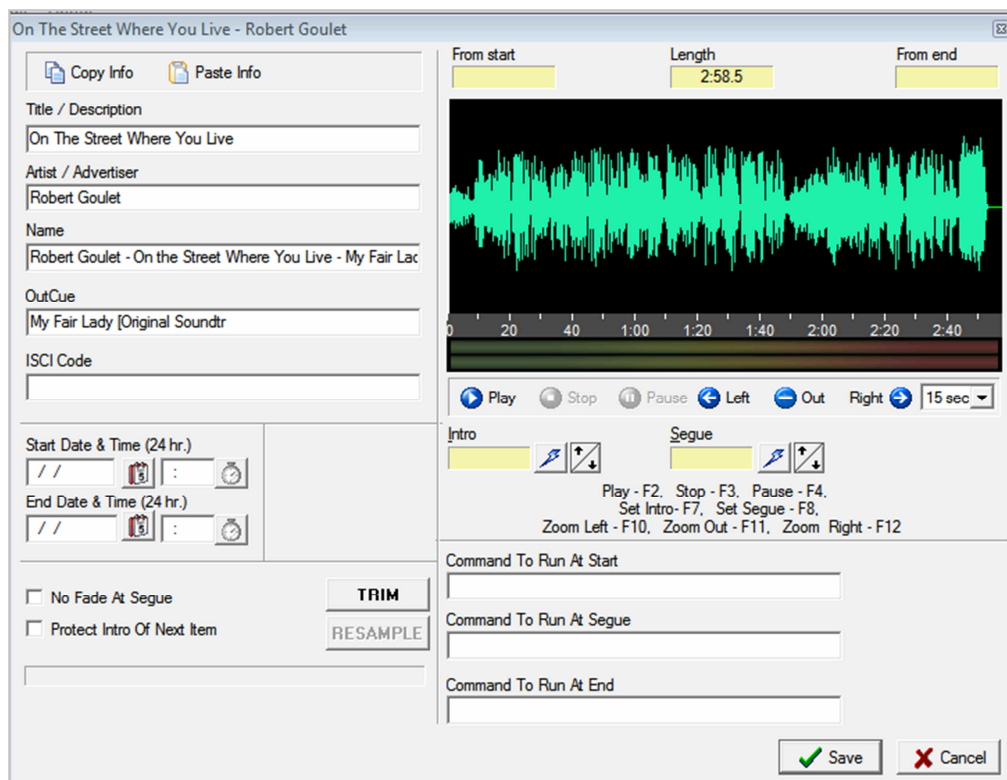
7.6 Editing Local Audio File Tagging Info


➤ To edit local audio file tagging info

1. Right-click an audio file in the local file list (left side in the File Manager), and then click **Edit Tags** from the pop-up menu.



A Tag Editor dialog box similar to the following appears.



2. Complete the fields in the dialog box (see Table 7-5).
3. When you finish, click  **Save**.

File Manager Module

Table 7-5. Fields in the Tag Editor Dialog Box

| Field | Description |
|----------------------------|---|
| Copy Info button | Click this button to copy the current tags to the Windows' Clipboard. |
| Paste Info button | Click this button to paste the current tags from the Windows' Clipboard. |
| Title/Description | Enter a title or description about the contents of your cart. |
| Artist/Advertiser | Enter an artist or advertiser that describes the contents of your cart. |
| Name | Name of the file in the system. Edit the name if desired. |
| OutCue | Enter the words at the end of a vocal or commercial so they know when it is time to talk. |
| ISCI Code | Enter Industry Standard Coding Identification (ISCI) code if applicable. |
| Start Date & Time | Date and time when a commercial is to start running. |
| End Date & Time | Date and time when a commercial is to stop running. |
| No Fade at Segue | As a file plays, the system applies a fade when the file hits a segue point. If a song has a fade at the end, check this check box unchecked to avoid applying a second fade. |
| Protect Intro Of Next Item | Controls overlap between items. For example, if an item has a long segue and is followed by another item that has a short intro, checking this check box protects the intro of the second item. In this example, if you uncheck the check box, the segue point of the first item would trail over the vocals of the next item. Typically, you would check this box for items that end with long segues. |
| TRIM button | Click this button to remove silence from the beginning and end of the item. |
| RESAMPLE button | If an item has a sample rate that is different from the other items in your audio library, click this button to resample the audio for consistency with your other items. |
| From start | Read-only field that shows the amount of time from the start of the item. |
| Length | Read-only field that shows the duration of the item. |
| From end | Read-only field that shows the amount of time to the end of the item. |
| Waveform | Shows the waveform of the currently playing item. You can click in the waveform, and then use the lightning bolt icon to set intro and segue points in the waveform. |
| Play button | Click this button to play the file. You can also play the file by pressing the F2 key on your keyboard. |
| Stop button | Click this button to stop the file. You can also stop the file by pressing the F3 key on your keyboard. |
| Pause button | Click this button to pause playing. You can also pause playing by pressing the F4 key on your keyboard. |
| Left button | Click this button to zoom into the left of the waveform. You can also zoom to the left by pressing the F10 key on your keyboard. |
| Out button | Click this button to zoom out to the normal waveform view. You can also zoom out by pressing the F11 key on your keyboard. |
| Right button | Click this button to zoom into the right of the waveform. You can also zoom in to the right by pressing the F12 key on your keyboard. |
| Zoom Dropdown | Sets the zoom view time period. |
| Intro | Length of the item's intro. |
| Segue | Length of the item's segue. |

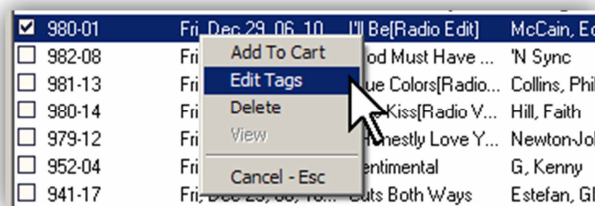
File Manager Module

| Field | Description |
|-------------------------|---|
| Command To Run At Start | Allows you to run a macro command as soon as the audio starts playing. |
| Command To Run At Segue | Allows you to run a macro command when the audio start segue point is reached. For example, you might want to run a macro that triggers an external Emergency Alert System (EAS) device after running an EAS message. |
| Command To Run At End | Allows you to run a macro command when the audio end point is reached. |

7.7 Editing Audio Tagging Info on the File Server

➤ To edit audio tagging info on the file server

1. Right-click an audio file in the file server list (right side in the File Manager), and then click **Edit Tags** from the pop-up menu.



An Tag Editor dialog box similar to the following appears.

WBSI - Music - "CCR - Bad Moon Rising-Front Channels"

Title / Description

Artist / Advertiser

Name

CCR - Bad Moon Rising-Front Channels

OutCue

Start Date & Time (24 hr.)

Time Window (24 hr.)

End Date & Time (24 hr.)

To

☐ No Fade At Segue

☐ Protect Intro Of Next Item

2. Complete the fields in the dialog box (see Table 7-5 on page 194).
3. When you finish, click **Save**.

7.8 Generating and Viewing Automation Reports

Automation system reports are an important and indispensable feature used by general managers and traffic managers. They are most commonly used to verify aired spots and promos to ensure your customer spots are getting aired in accordance with your promise to your customers. In addition, many traffic and billing software packages use automation reports to create affidavits and automatically verify spots and insert “make goods” for your station(s) later program logs.

OpX One’s report generating facilities allow you to create report templates to include or ignore data types of your choosing. The following sections describe how to create a report template and run a report.

7.8.1 Creating a Report Template

Report templates in OpX One define the information that will be added to a report when a report is run. Defining a template involves selecting the types of data you want the report to show and selecting a format for your report. Table 7-6 describes the data types you can include in your report.

Table 7-6. Report Data Types

| Data Type | Description |
|---------------|--|
| Spots | Events playing from a folder, with its Contents type set to “Spots” and all events inserted into the program log by importing a traffic log. |
| Skipped Spots | Spot events skipped over because of timed events or time syncs, but not errored. |
| Music | Events playing from a folder, with its Contents type set to “Music” and all events inserted into the program log by importing a music log. |
| Skipped Music | Music events skipped because of timed events or time syncs, but not errored. |
| Carts | Any cart played will record this data type. |
| Other Audio | Anything event stored in a folder, with its contents type set to “Audio” will record this data type when played. |
| Errors | Events attempted to be played that cannot play because the item does not exist, is in an incorrect format, or a playback device is not available will record this data type. |
| Warnings | Started a new sat show while one was already running. |
| Infos | Internal system tasks, such as getting files from the server or updating program logs, or uploading run logs, and so on. |
| Closures | Any time a trigger device receives a closure, it will record that event with this data type. |
| Inserts | When an item is inserted into the program log, a record of this occurrence is recorded with this data type. |
| Deletes | If a user deletes an item from the program log, this data type keeps record of that occurring. |
| Stops | Clicking the Stop button of a deck will report this data type. |

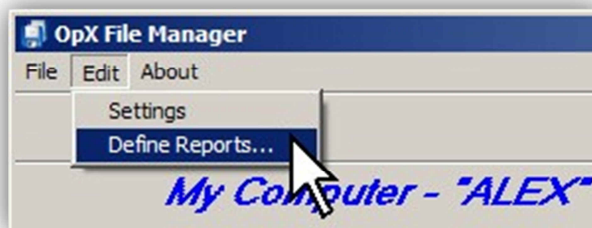
File Manager Module

| Data Type | Description |
|-------------|--|
| Macros | Executing a macro by a playback deck will record this data type. |
| Time Events | Any event that has a set time — including music, spots, or macros — that have a cue type of Time Immediate or Time Next. Includes any event added to the Scheduled Events. |

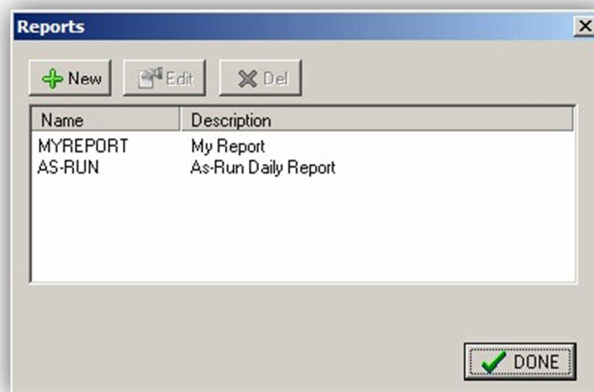
OpX One automation reports can be generated in ASCII text formats, with either a position-dependent or delimited format. Column order and position are user configurable.

➤ **To create an automation report template**

1. On the Edit menu, click **Define Reports**.



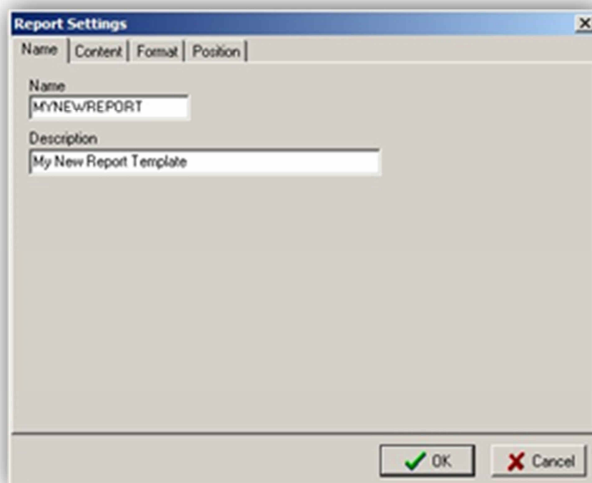
The Reports dialog box appears.



2. From this dialog box, you can:
 - Define a new report: Click the **New** button.
 - Edit a report: Highlight the report from the list, and then click the **Edit** button.
 - Delete a report: Highlight the report from the list, and then click the **Delete** button.

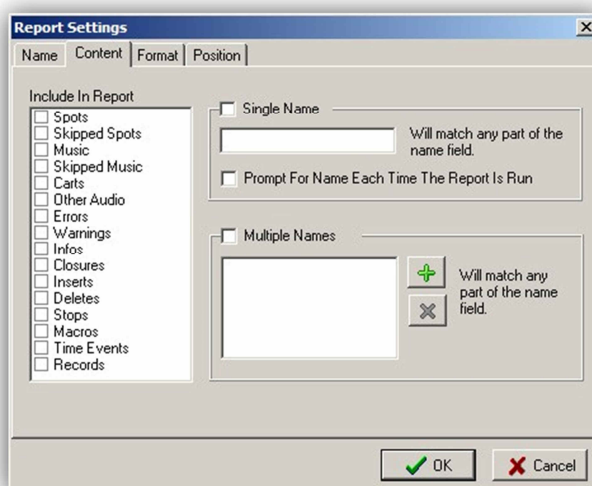
File Manager Module

If you clicked **New** or **Edit**, the Report Settings dialog box appears.



The image shows the 'Report Settings' dialog box with the 'Name' tab selected. The 'Name' field contains 'MYNEWREPORT' and the 'Description' field contains 'My New Report Template'. The 'Content', 'Format', and 'Position' tabs are also visible. At the bottom right, there are 'OK' and 'Cancel' buttons.

3. For a new report, enter a short name in the **Name** field and enter a description in the **Description** field. Click the **Content** tab.
4. On the **Content** tab, select the types of data want to include in your report. The example in the figure below includes events that did not play, which is useful for determining your “make-goods.” To limit your report to show only data pertaining to a single file name, or several particular file names, use the **Single Name** or **Multiple Names** section to configure file name filters.



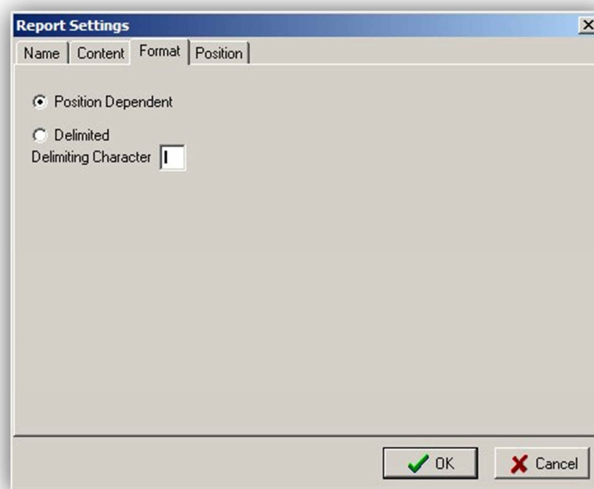
The image shows the 'Report Settings' dialog box with the 'Content' tab selected. On the left, under 'Include In Report', there is a list of checkboxes for various data types: Spots, Skipped Spots, Music, Skipped Music, Carts, Other Audio, Errors, Warnings, Infos, Closures, Inserts, Deletes, Stops, Macros, Time Events, and Records. On the right, there are two sections: 'Single Name' and 'Multiple Names'. The 'Single Name' section has a text field and a checkbox labeled 'Prompt For Name Each Time The Report Is Run'. The 'Multiple Names' section has a text field, a '+' button, an 'X' button, and a checkbox. Both sections have a note: 'Will match any part of the name field.' At the bottom right, there are 'OK' and 'Cancel' buttons.

5. Check the types of content to include.
6. After you select all the data types you want to include, click the **Format** tab.

File Manager Module

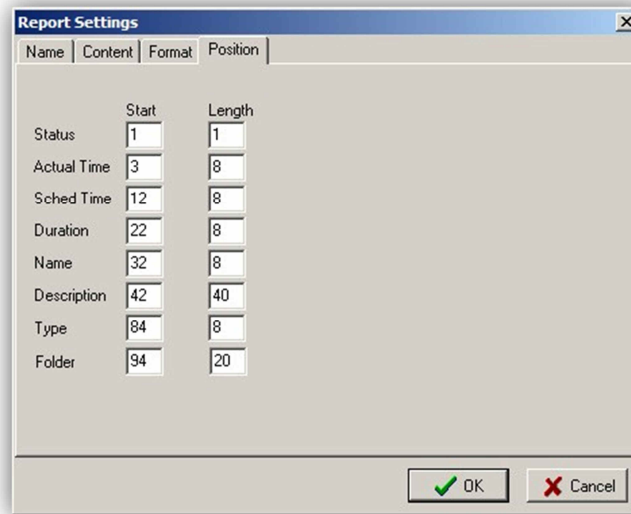
7. The **Format** tab allows you to select the output format of your report. Two formats are available:

- **Position Dependent** — select this format to read your report directly or if the application you want to import the report into asks for this data type.
- **Delimited** — select this format if the application you want to import specifies this format or allows you to make your own choice. Setup for this format is easier than position dependent.



- If you selected **Position Dependent**, click the **Position** tab. The following dialog box appears, except that a new report template has zeros for all the **Start** and **Length** settings. The **Start** and **Length** settings depend on what you are importing the data into. If you are going to view the report directly without importing your data into another application, the settings in the following figure will work for most cases.

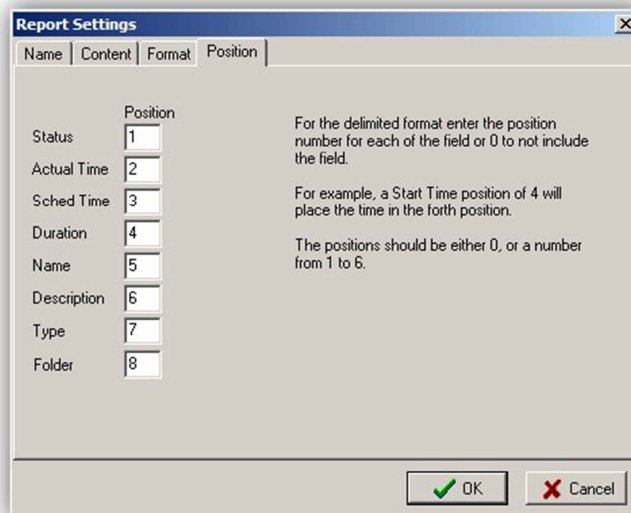
File Manager Module



The 'Report Settings' dialog box is shown with the 'Format' tab selected. It contains a table with two columns: 'Start' and 'Length'. The rows are labeled with field names: Status, Actual Time, Sched Time, Duration, Name, Description, Type, and Folder. The values in the 'Start' column are 1, 3, 12, 22, 32, 42, 84, and 94 respectively. The values in the 'Length' column are 1, 8, 8, 8, 8, 40, 8, and 20 respectively. At the bottom right, there are 'OK' and 'Cancel' buttons.

| | Start | Length |
|-------------|-------|--------|
| Status | 1 | 1 |
| Actual Time | 3 | 8 |
| Sched Time | 12 | 8 |
| Duration | 22 | 8 |
| Name | 32 | 8 |
| Description | 42 | 40 |
| Type | 84 | 8 |
| Folder | 94 | 20 |

- If you selected **Delimited**, enter the delimiting character into the **Delimiting Character** field on the **Format** tab (most applications use the | symbol). Click the **Position** tab. A tab similar to the one below appears, except that a new report template has zeros for all the **Position** settings. The **Position** settings determine the order each field will be added to the report.



The 'Report Settings' dialog box is shown with the 'Position' tab selected. It contains a table with one column: 'Position'. The rows are labeled with field names: Status, Actual Time, Sched Time, Duration, Name, Description, Type, and Folder. The values in the 'Position' column are 1, 2, 3, 4, 5, 6, 7, and 8 respectively. To the right of the table, there is explanatory text: 'For the delimited format enter the position number for each of the field or 0 to not include the field. For example, a Start Time position of 4 will place the time in the forth position. The positions should be either 0, or a number from 1 to 6.' At the bottom right, there are 'OK' and 'Cancel' buttons.

| | Position |
|-------------|----------|
| Status | 1 |
| Actual Time | 2 |
| Sched Time | 3 |
| Duration | 4 |
| Name | 5 |
| Description | 6 |
| Type | 7 |
| Folder | 8 |

For the delimited format enter the position number for each of the field or 0 to not include the field.
For example, a Start Time position of 4 will place the time in the forth position.
The positions should be either 0, or a number from 1 to 6.

8. After completing the Report Settings dialog box, click **OK**.

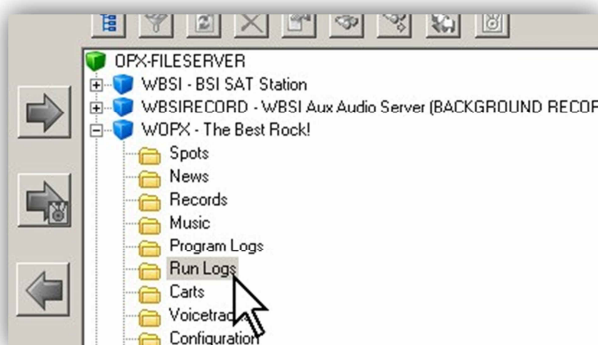
7.8.2 Running a Report

The following procedure describes how to run a report. This procedure assumes you created a report template (see section 7.8.1).

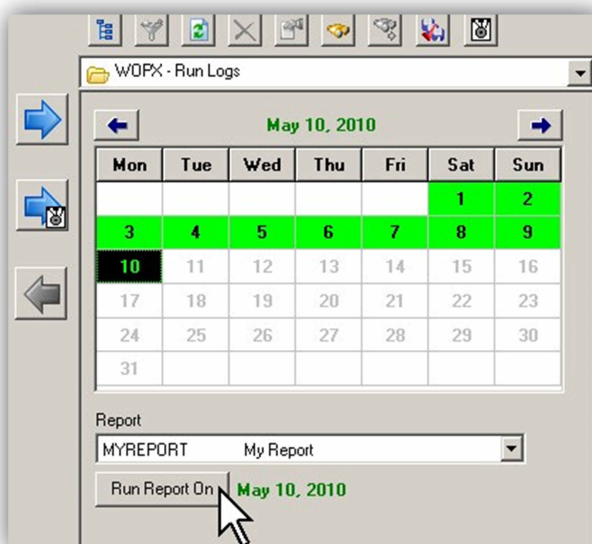
➤ **To run a report using an automation report template you created**

1. Browse through the station folder tree on the right side of the File Manager module to find the **Run Logs** folder for your desired station, and then click it.

The right-side of the window switches to Report Viewer mode.



2. Select the month and date that the report will cover.



3. Using the **Report Template** drop-down list, select a report template.

4. Click the **Run Report On** button.

The report is generated and automatically opens in your default .txt viewing application (typically Windows Notepad).

8 Clock Builder Module

Topics:

- ^ *Starting the Clock Builder Module (page 205)*
- ^ *Quick Tour (page 207)*
- ^ *Configuring the Clock Builder Module (page 215)*
- ^ *Creating a New Clock (page 216)*
- ^ *Sample Clocks (page 240)*

This chapter describes the OpX One Clock Builder module. This module creates clock templates.

Many stations require the ability to rebroadcast satellite originated shows. These shows include signals (closures) to tell automation systems such as OpX One when the show starts, stops, and when to play ID's, liners, and breaks.

Unlike other automation systems, OpX One uses a Clock Builder to determine how to work with your satellite broadcasts. Not only does the Clock Builder offer a visually familiar method of configuration, it offers an intuitive and quick method to add or modify shows, schedule satellite breaks, and more in a visual, easy-to-understand way.

With the multitude of station formats, some stations will have all their content originate from files stored on their local hard drive (such as with "music—from—hard—drive" stations), while other stations will have a combination of local from-hard-drive content and satellite rebroadcasts. The extreme case is a station that gets all of its content from satellite, as in Figure 8-1 on page 206. The OpX One Clock Builder module allows easy handling of these situations without requiring you to memorize or look up special commands to enter. The result is simplified setup and modification of your station's format.

8.1 Starting the Clock Builder Module

Before you set up clocks or schedule breaks:

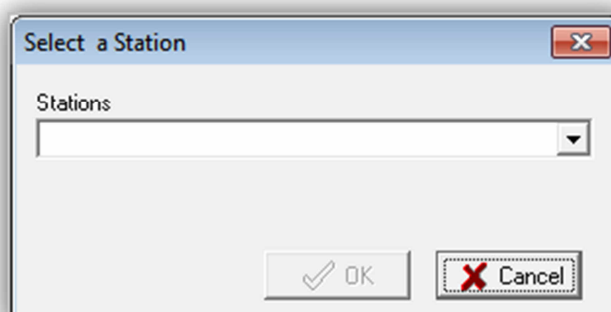
- Configure the OpX One Audio Server because clock setup depends on the configuration of your Audio Server. See Chapter 4 for information about setting up your OpX One Audio Server.
- Confirm that the following parts of OpX One are configured:
 - Your switcher device, so OpX One can switch between sources automatically
 - Your closure device, so OpX One can respond to network triggers
 - A mixer in your OpX One Audio Server, so OpX One can control the volume of your source
- Connect and configure your hardware, including your trigger device, any switcher, and your OpX One Mixers. See Chapter 4.

After you perform these tasks, start the Clock Builder module.

➤ To start the Clock Builder module

1. Start the File Server module (see section 3.1).
2. Click the Windows Start button and click **Programs > Broadcast Software > Clock Builder**.

You are prompted to select a station.



3. Using the **Stations** drop-down list, click a station.
4. Click **OK**.

Clock Builder Module

The OpX One Clock Builder module is populated with the information from the selected station.

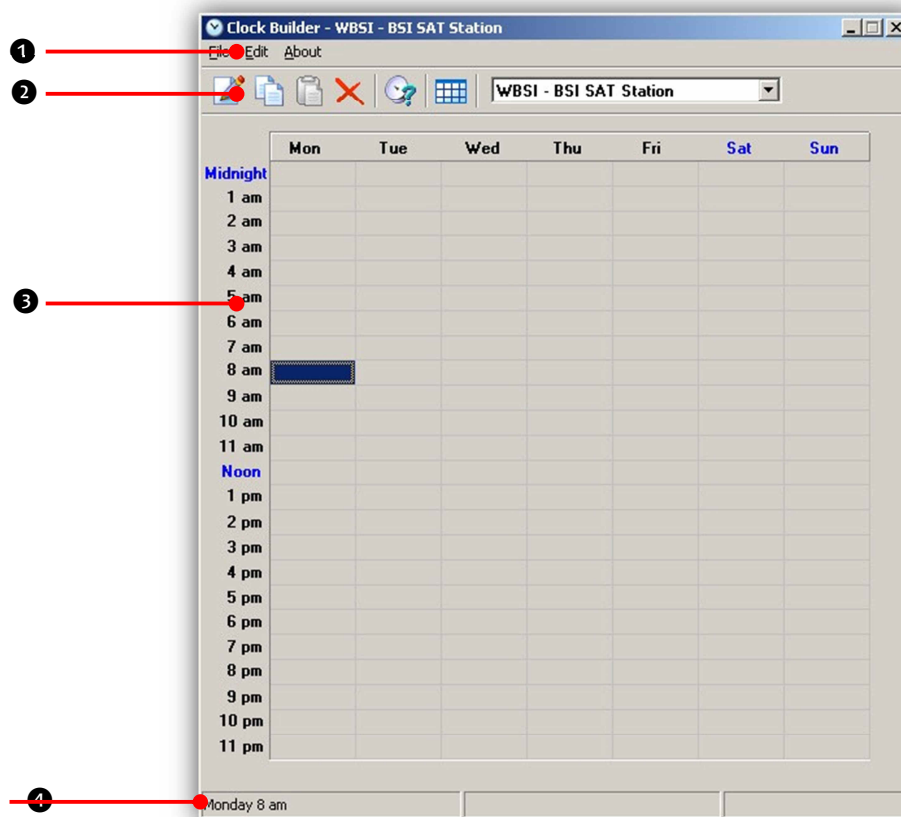
| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|-----------------|-------------|-------------|-------------|-------------|-------------|----------------|------------------|
| Midnight | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 1 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 2 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 3 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 4 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 5 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 6 am | LIVE | LIVE | LIVE | LIVE | LIVE | ABM | ABM / PA |
| 7 am | LIVE | LIVE | LIVE | LIVE | LIVE | ABM | Wakeup Call |
| 8 am | LIVE | LIVE | LIVE | LIVE | LIVE | ABM | Church Serv... |
| 9 am | ABM | ABM | ABM | ABM | ABM | Real Wealth | Jerry Schneid... |
| 10 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 11 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| Noon | PH / AUTO | PH / AUTO | PH / AUTO | PH / AUTO | PH / AUTO | PH / AUTO | ABM |
| 1 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 2 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 3 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 4 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 5 pm | VBAR / Auto | VBAR / Auto | VBAR / Auto | VBAR / Auto | VBAR / Auto | ABM | ABM |
| 6 pm | ABM | ABM | ABM | ABM | ABM | Church Serv... | ABM |
| 7 pm | ABM | ABM | ABM | ABM | ABM | Church Serv... | ABM |
| 8 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 9 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 10 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 11 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |

PH / AUTO 1 Selected

Figure 8-1. Example of Clock Builder Module

8.2 Quick Tour

The following sections provide a quick tour of the Clock Builder module interface.

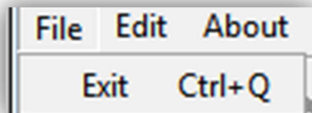


| Number | Description |
|--------|---|
| ① | Menu bar. See section 8.2.1. |
| ② | Tool bar and station selector. See section 8.2.2. |
| ③ | Grid display. See section 8.2.3. |
| ④ | Status bar. See section 8.2.4. |

8.2.1 Menu Bar

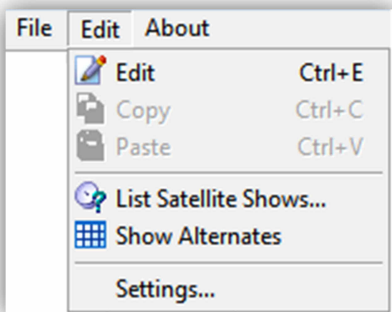
The menu bar appears at the top of the Clock Builder window. The following sections describe the menu options.

8.2.1.1 File Menu



Exit = exits the Clock Builder module.

8.2.1.2 Edit Menu



Edit = opens the Clock Editor for the highlighted clock on the grid display.

Cut = removes the highlighted clock from the grid display and copies it to the Windows' Clipboard.

Copy = copies to the Windows' Clipboard the highlighted clock on the grid display.

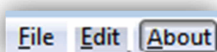
Paste = pastes a cut or copied clock from the Windows' Clipboard over the currently highlighted clock on the grid display.

List Satellite Shows = shows all Satellite Show Start events in a list or tree view window.

Show Alternates = switches the current grid display view to show alternate clocks instead of Monday-Sunday clocks.

Settings = configures Clock Builder module settings. See section 8.3.

8.2.1.3 About Menu



Opens a window that shows the version and build date of the Clock Builder module you are running. This window also shows the amount of memory and virtual memory being used,

and the amount of time that the Clock Builder module has been running See Figure 8-2 for an example. To close the window, click **OK**.

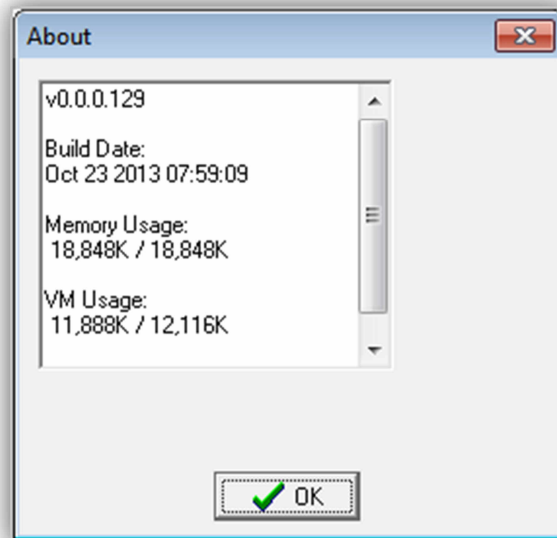


Figure 8-2. Example of About Information

8.2.2 Tool Bar and Station Selector

The tool bar and station selector appear below the menu bar. Table 8-1 describes the tools on the tool bar.

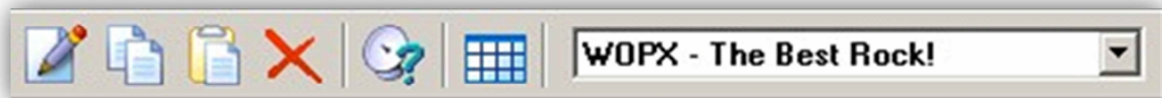





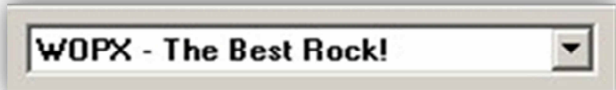



Figure 8-3. Log Name and Station Selector

Table 8-1. Clock Builder Tool Bar and Station Selector

| Tool | Tool Name | Description | Tool | Tool Name | Description |
|---|------------|--|--|---------------------------------|--|
|  | Edit Clock | Opens the Clock Editor for the highlighted hour on the grid display. |  | List Satellite Shows | Shows all satellite show start events in a list or tree view window. |
|  | Copy | Copies the highlighted hour in the grid display to the Windows' Clipboard. |  | Show Alternates | Switches the grid display current view to show alternate clocks instead of the Monday-Sunday clocks. |
|  | Paste | Pastes a copied clock from the Clipboard to the highlighted hour in the grid display and replaces any existing clock settings. |  | Station Selector drop-down list | Switches between stations on your OpX One system to view and edit the clock sets for each. |
|  | Delete | Removes all clock settings from the currently highlighted clock on the grid display. | | | |

8.2.3 Grid Display

The grid display is a spread-sheet style diagram of the clocks you create for each hour of each day of the week.

- The x-axis (horizontal) has columns for each day of the week or, while in the Show Alternates view, the columns are for each alternate day.
- The y- axis (vertical) has rows for each hour of the day.

To edit a clock, double-click the clock block in the grid display to open that time period's clock in the Clock Editor.

| | Mon | Tue | Wed | Thu | Fri | Sat | Sun |
|----------|-------------|-------------|-------------|-------------|-------------|------------|----------------|
| Midnight | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 1 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 2 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 3 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 4 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 5 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 6 am | LIVE | LIVE | LIVE | LIVE | LIVE | ABM | ABM / PA |
| 7 am | LIVE | LIVE | LIVE | LIVE | LIVE | ABM | ABM / PA |
| 8 am | LIVE | LIVE | LIVE | LIVE | LIVE | ABM | Church Serv. |
| 9 am | ABM | ABM | ABM | ABM | ABM | Past Veath | Jerry Schneid. |
| 10 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 11 am | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| Noon | PH / AUTO | PH / AUTO | PH / AUTO | PH / AUTO | PH / AUTO | PH / AUTO | ABM |
| 1 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 2 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 3 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 4 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 5 pm | VBAY / Auto | VBAY / Auto | VBAY / Auto | VBAY / Auto | VBAY / Auto | ABM | ABM |
| 6 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 7 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 8 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 9 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 10 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |
| 11 pm | ABM | ABM | ABM | ABM | ABM | ABM | ABM |

Figure 8-4. Sample Grid Display

8.2.4 Status Bar

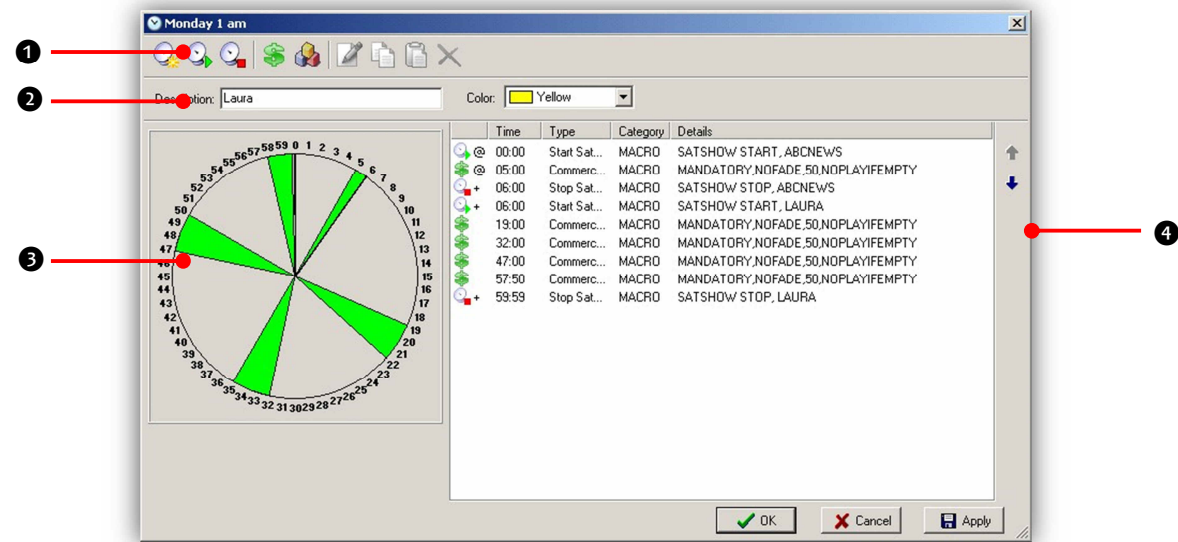
The status bar shows the title of the currently highlighted clock. If you have multiple items selected (by shift-clicking or ctrl-clicking), the status bar also shows the number of items selected.

| | | |
|-----------|------------|--|
| PH / AUTO | 1 Selected | |
|-----------|------------|--|

Figure 8-5. Status Bar

8.2.5 Navigating the Clock Editor Window

The Clock Editor has its own tool bar and description bar for creating and modifying clocks.



| Number | Description |
|--------|---------------------------------------|
| 1 | Tool bar. See section 8.2.5.1. |
| 2 | Description bar. See section 8.2.5.2. |
| 3 | Clock display. See section 8.2.5.3. |
| 4 | Event List. See section 8.2.5.4. |

8.2.5.1 Clock Editor Window Tool Bar

The Clock Editor tool bar contains icons for performing the tasks described in

Table 8-2.

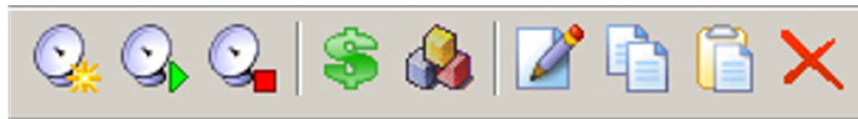











Figure 8-6. Clock Editor Toolbar

Clock Builder Module

Table 8-2. Clock Editor Tool Bar

| Tool | Tool Name | Description | Tool | Tool Name | Description |
|--|-------------------------------|---|---|------------|---|
|  | New Satellite Show | Opens the Satellite Show editor to create a new satellite show start event. |  | Edit Event | Edits an event that has been added to your clock. |
|  | Start Existing Satellite Show | Creates a new satellite show start event from a previously created satellite show item. |  | Copy | Copies the highlighted event to the Windows' Clipboard. |
|  | Stop Satellite Show | Returns the automation system to local audio playback or stops the satellite audio. |  | Paste | Pastes a copied event from the Clipboard to the highlighted event in your event list. |
|  | New Commercial Break | Adds commercial breaks to your clock. |  | Delete | Removes an event that you added to your clock. |
|  | New Event | Creates new non-stopset events such as audio events, macros, or comments. | | | |

8.2.5.2 Clock Editor Window Description Bar

The Description Bar contains the **Description** field and the **Color** drop-down list. The text you type into the **Description** field and the color you select from the **Color** drop-down list allow you to name and color your clock's block on the grid display for easy identification in the Clock Builder. Figure 8-1 on page 206 shows an example of a grid display that has descriptions and colors selected for each clock.

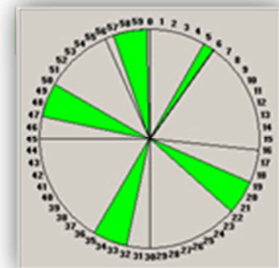
Description:
 Color:  Yellow

Figure 8-7. Description Bar

8.2.5.3 Clock Display

The clock display provides a visual representation of the events you add to the event list.

- Green “pie wedges” represent breaks.
- Thin black radius lines represent satellite show start, satellite show stop, and custom events.



8.2.5.4 Event List

The event list shows all the events your clock will perform. To shuffle an event up or down in the list, highlight the desired event and click the Up or Down icon in the top-right corner of the event list.

| Time | Type | Category | Details |
|-------|--------------|----------|--------------------------|
| 00:00 | Start Sat... | MACRO | SATSHOW START, ABGNEWS |
| 05:00 | Commerc... | MACRO | MANDATORY,NOFADE,50,NOPL |
| 06:00 | Start Sat... | MACRO | SATSHOW START, LAURIE |
| 16:00 | Event | COMM... | Time Sync |
| 19:00 | Commerc... | MACRO | MANDATORY,NOFADE,50,NOPL |
| 30:00 | Event | COMM... | Time Sync |
| 32:00 | Commerc... | MACRO | MANDATORY,NOFADE,50,NOPL |
| 45:00 | Event | COMM... | Time Sync |
| 47:00 | Commerc... | MACRO | MANDATORY,NOFADE,50,NOPL |
| 56:00 | Event | COMM... | Time Sync |
| 56:50 | Commerc... | MACRO | MANDATORY,NOFADE,50,NOPL |

8.3 Configuring the Clock Builder Module

The Clock Builder module comes with default configuration settings that should suit most users. Using the **Settings** option on the **Edit** menu, you can change these settings to suit your requirements.

➤ To configure the Clock Builder module settings

1. On the **Edit** menu, click **Settings**.

The Settings dialog box appears.

2. Complete the fields in the dialog box (see Table 8-3).
3. Click **OK**.

Table 8-3. Fields in the Settings Dialog Box

| Field | Description | Default |
|---|---|---------------------|
| Network Interface | Read-only field that shows the IP address to which the OpX One network interface is connected | 10.1.1.10 - OpX One |
| File Server Address | <ul style="list-style-type: none"> • Checked = use the FTP server IP address. Enter the IP address in the dotted-decimal field. • Unchecked = do not use the FTP server IP address. | Unchecked |
| Force Default Mixer In Live Satellite Shows | Check this check box to have the system pick the first mixer configured on the New Satellite Show dialog box. | Unchecked |

8.4 Creating a New Clock

To set up your satellite clocks, open the OpX One Clock Builder module. You will be prompted to select which station you would like to work on (see Figure 9.3). Figure 9.2 shows the initial screen you will see when opening the Clock Builder. It is a grid representation with columns for each day and rows for each hour of the day. The grid will be empty until clocks are added. Figure 9.1 shows what a Clock Builder grid looks like when fully populated with clocks

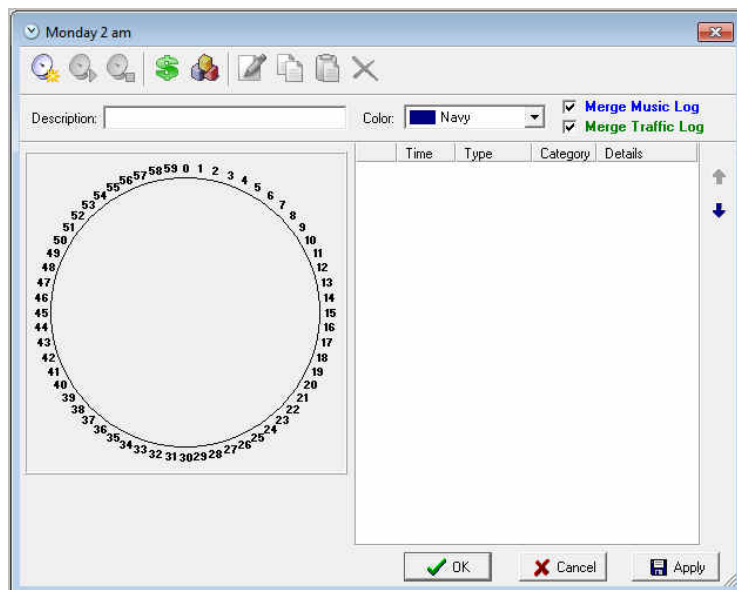
➤ To create a new clock

1. In the Clock Editor, double-click the hour block for the hour/day on which you want to create the clock.

The Clock Editor appears for the hour you selected.



2. In the **Description** field, enter a title for this clock.
3. If desired, select a color for the clock's hour-block in the Clock Builder grid display for easy identification.
4. The most common satellite rebroadcast clock consists of the following events:
 - A command to put your satellite show on the air (a satellite show start event), which controls your audio switching and I/O hardware.
 - Commercial break periods, where OpX One is to replace network spots with your local content (a commercial break event).
 - A command to turn off the satellite show and return the automation system to local audio (a satellite show stop event) or another satellite show.



To put your satellite show on the air, OpX One must know how to start your satellite show-what inputs to turn on, what triggers to use, and how to behave. Leave the Clock Builder open and see the following sections for procedures about performing these tasks.

8.4.1 Creating a New Satellite Show Start Event

You create a new satellite show start event using the New Satellite Show dialog box. This dialog box presents a number of pages containing configuration settings. To see examples of completed clocks, see section 8.5.

➤ **To create a new satellite start event**

1. Click the **New Satellite Show** icon.



The New Satellite Show dialog box appears.

2. Complete the fields in the dialog box (see
- 3.
- 4.
5. Table 8-4).

Table 8-4. Page 1 Fields in the New Satellite Show Settings Dialog Box

| Field | Description | Default |
|-------------|--|--------------------|
| Cue | Under most circumstances, select Time Immediate [@]. | Time Immediate [@} |
| Time | Select start time of your satellite show. For shows that start at the top of the hour, select 00:00. | 00:00 |
| Name | Enter a short name for your show. | — |
| Description | Enter a name that will be added to the list of created satellite shows. | — |

6. Click **Next**.

The second page appears in the New Satellite Show dialog box.

Clock Builder Module

New Satellite Show

Enter the talent and type of the satellite show.

☒ Live

☐ Time Shift (Virtual Closures Only)

☐ Record

Record Deck

Not Applicable

File Name

?

☐ Trim File After Record

☐ Share With Other Stations (Upload To File Server)

Back Next

OK Cancel

7. Complete the fields in the dialog box (see
8. Table 8-5).

Table 8-5. Page 2 Fields in the New Satellite Show Settings Dialog Box

| Field | Description | Default |
|---------------------------|--|----------------|
| Live | Check this check box to go to the satellite feed playing at that time. | Checked |
| Time Shift | Check this box to play back a previously recorded show. | Unchecked |
| Record | If you want to record a satellite show at a time other than when the show is being broadcast, check this check. The file will then be recorded at the time you specified in the previous dialog box. | Unchecked |
| Record Deck | Select one of the four record decks in the system. | Not Applicable |
| File Name | Enter the name you want to assign to the recorded file. | — |
| Trim File After Record | Check this check box to remove the silence from the recorded file. | Unchecked |
| Share With Other Stations | Check this check box to upload the recorded file to the File Server, so the file can be shared with other stations. | Unchecked |

9. Click **Next**.

The third page appears in the New Satellite Show dialog box.

Clock Builder Module

New Satellite Show

Select the closure device, start of stop-set closure, switching and mixer.

Closure Device
 Not Applicable

Start Commercial Break Closure: Not Applicable Delay 1/10 Sec 0

☐ Commercial Breaks Float Past The Top Of The Hour
☒ Automatically Fill Commercial Breaks

Switching

| Device | Input | Output | Mt | NO |
|--------|-------|--------|----|----|
| | | | | |

Mixer
 Not Applicable

☒ Fade Up At Start Of Show
☒ Fade Down At End Of Show

Back Next

OK Cancel



10. Complete the fields in the dialog box (see

11. Table 8-6).

Table 8-6. Page 3 Fields in the New Satellite Show Settings Dialog Box

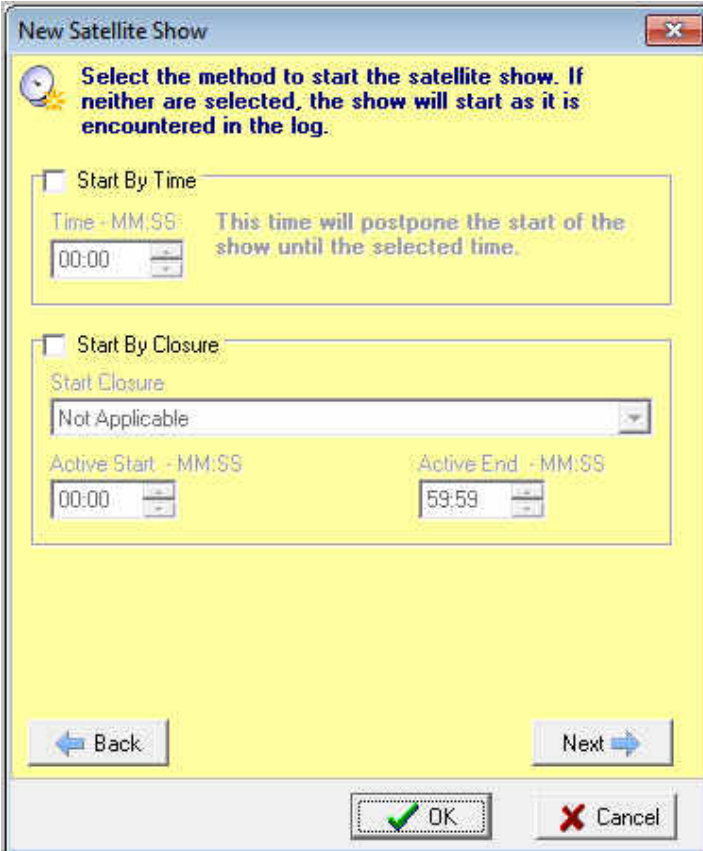
| Field | Description | Default |
|--|---|----------------|
| Closure Device | Select your closure hardware device. | Not Applicable |
| Start Commercial Break Closure | Select your local break trigger. | Not Applicable |
| Delay | Adds a delay to the commercial break closure. | 0 |
| Commercial Breaks Float Past The Top Of The Hour | Causes OpX One to look ahead in your clock each time a break start trigger is received. <ul style="list-style-type: none"> Checked = if more break closures are received and there are no more breaks in your clock (for example, all expected breaks have been played), the closure is ignored. Unchecked = use this setting if you set up multi-hour satellite shows that only have a satellite show start event in the first hour's clock. | Unchecked |
| Automatically Fill Commercial Breaks | <ul style="list-style-type: none"> Checked = OpX One automatically fills breaks that are not filled with content from your traffic software. Unchecked = OpX One does not automatically fill breaks. | Checked |

Clock Builder Module

| Field | Description | Default |
|----------------------------|--|----------------|
| Switching | <p>Add profiles to determine the routing of audio-switching devices for this satellite show. If you do not have any audio routing/switching hardware, leave this field empty.</p> <ul style="list-style-type: none"> Click the Add Switcher Routing button  to add a profile. Click the Delete Switcher Routing button  to remove the highlighted device from the list. | — |
| Mixer | Determines what input/output of your audio card(s) are unmuted at the start of your satellite show, muted during breaks, and muted at the end of your show. For configurations with an audio switcher, connect your audio switcher's output to an input on your soundcard and set up the audio switcher as a mixer in your audio server configuration. For configurations without an audio switcher, connect your satellite's output directly to the audio card's input and configure the audio card as a mixer in your audio server's settings. For information about setting up OpX One's mixers, see Chapter 4. | Not Applicable |
| Fade Up At Start Of Show | Check this check box to have the mixer adjust the volume control up at the start of the show. | Checked |
| Fade Down At Start Of Show | Check this check box to have the mixer adjust the volume control down at the end of the show. | Checked |

12. Click **Next**.

The fourth page appears in the New Satellite Show dialog box.



New Satellite Show

Select the method to start the satellite show. If neither are selected, the show will start as it is encountered in the log.

☐ **Start By Time**

Time - MM:SS: This time will postpone the start of the show until the selected time.

☐ **Start By Closure**

Start Closure:

Active Start - MM:SS: Active End - MM:SS:

13. Complete the fields in the dialog box (see Table 8-7).

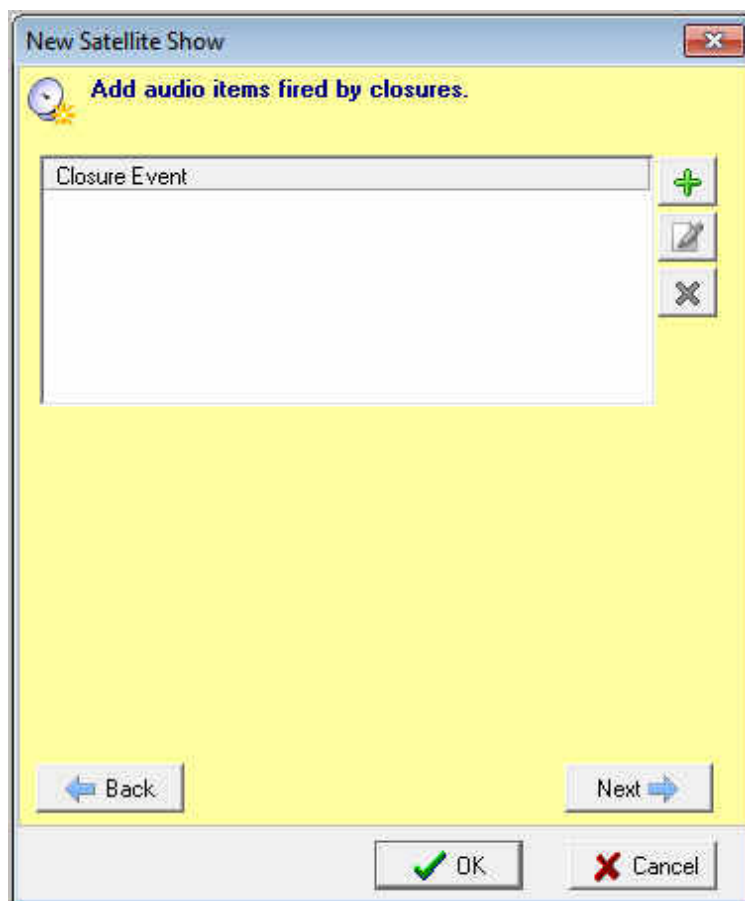
Clock Builder Module

Table 8-7. Page 4 Fields in the New Satellite Show Settings Dialog Box

| Field | Description | Default |
|----------------------|---|----------------|
| Start By Time | Allows you to delay the start of your satellite show until a time of your choosing. Like an offset, if you set your satellite show event to start at the top of the hour and set this option to 5:00, your satellite show will not start until 5:00 minutes after. This option is not used in most circumstances. | Unchecked |
| Start By Closure | Allows you to start your satellite show by closure. If you air a satellite show that has a floating start, this option allows you to join when the satellite receiver sends a closure. By default, the closure selected is "listened to" for the full hour, but you can limit the active window by setting the Active Start and Active End fields | Not Applicable |
| Active Start – SS:MM | Start time when this event will be active. | 00:00 |
| Active End – SS:MM | End time when this event will no longer be active. | 59:59 |

14. Click **Next**.

The fourth page appears in the New Satellite Show dialog box.



Clock Builder Module

15. Select audio files or carts to be played when specific closures are received from your satellite receiver via closure hardware connected to your OpX One Audio Server. This function is useful for station ID closures or “magic calls.” If you do not need to handle these types of events, click **Next** to continue to the next page and go to the next step.

To add a new event, click the **Add**  button. When the Closure Event dialog box appears, complete the fields in the dialog box (see

16. Table 8-8).

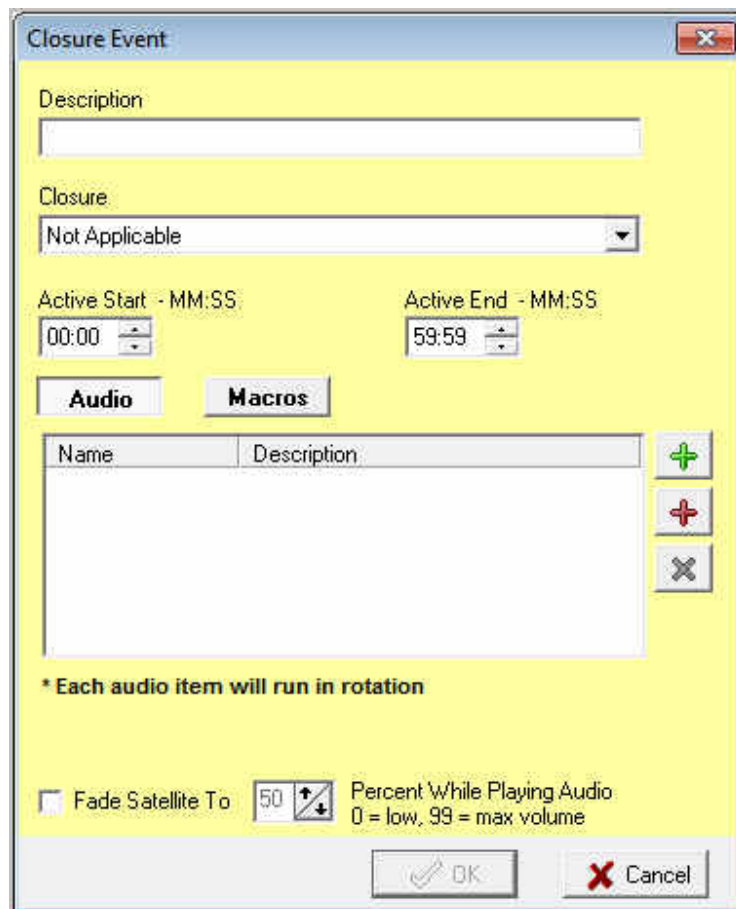



Table 8-8. Fields in the Closure Event Dialog Box

| Field | Description | Default |
|----------------------|---|----------------|
| Description | Enter a description for your closure event. | — |
| Closure | Select your incoming closure that will fire your event. | Not Applicable |
| Active Start – SS:MM | Start time when this event will be active. | 00:00 |
| Active End – SS:MM | End time when this event will no longer be active. | 59:59 |

Clock Builder Module

| Field | Description | Default |
|-------------------|---|-----------|
| Name/Description | Add a new event by clicking the Add  button. Drag and drop your audio files from the File Library to the Audio list, as shown in Figure 8-8. You can add multiple items audio list if want multiple items to all play consecutively each time the closure event is triggered. For rotator behavior, create a cart of items and add it to the closure event. | — |
| Fade Satellite To | <ul style="list-style-type: none"> Checked = forces the main satellite feed to duck under your Closure Event rather than mute the satellite feed. | Unchecked |

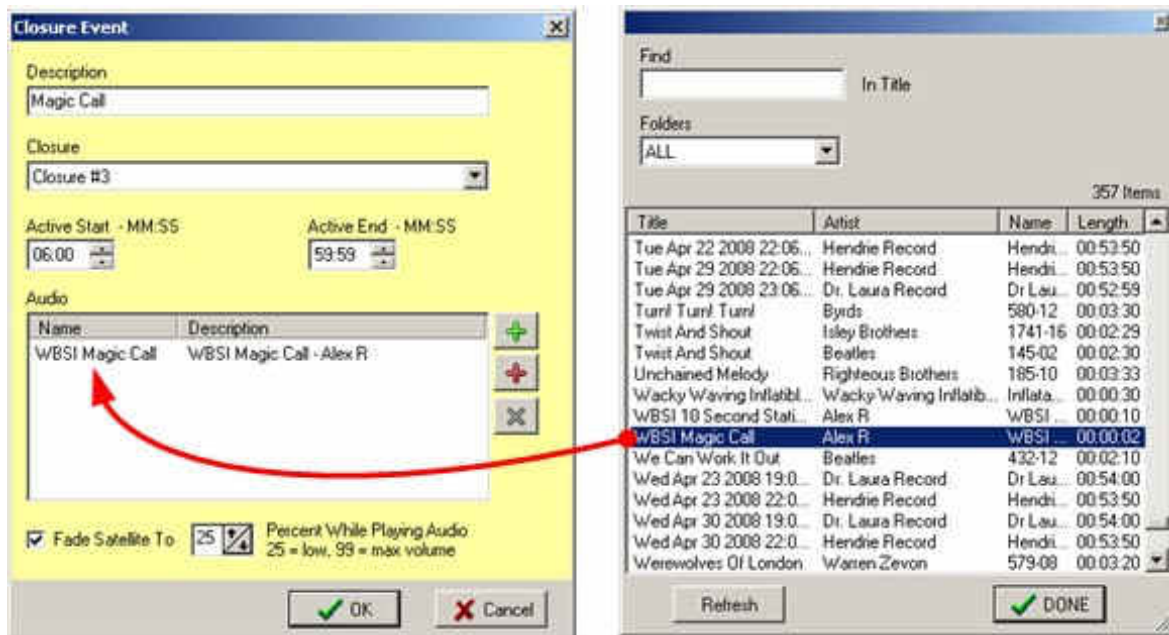


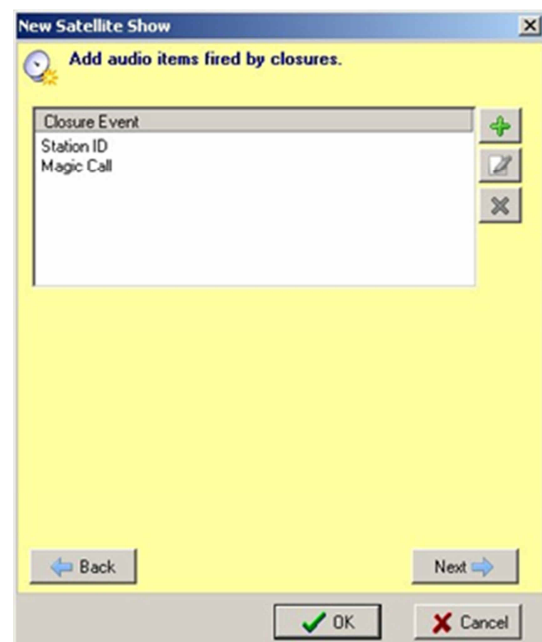


Figure 8-8. Dragging and Dropping Audio Files

You can add multiple closure events, where each one handles the events for a single closure during a specified time period. In the figure below, two closure events are created: one to handle a “magic call” closure event and the other to handle a floating station ID closure event.

To edit a closure event, click it in the closure event list and click the **Edit**  button. To delete a closure event, click it in the closure event list and click the **Delete**  button.



Clock Builder Module

17. After you create, edit, or delete closure events, click the **Next** button to go to the next page.

The fifth page appears in the New Satellite Show dialog box. These settings determine how your satellite program will be stopped.

18. Complete the fields in the dialog box (see

19.

20.

21. Table 8-9).

Table 8-9. Page 5 Fields in the New Satellite Show Settings Dialog Box

| Field | Description | Default |
|----------------------|--|----------------|
| Stop On Closure | Ends your satellite show when a specific closure is received during the time period you select from the Active Start to the Active End fields. | Not Applicable |
| Active Start – MM:SS | Start time when this satellite show will be active. | 00:00 |
| Active End – MM:SS | End time when this satellite show will no longer be active. | 59:59 |
| Stop By Length | Runs your satellite show for the specified length. The time you select is a count-down time. For example, if you select 00:45:00 and your satellite show starts at six minutes after the hour, your satellite show ends at 56 minutes past the hour. | Unchecked |



Note: Many situations dictate that neither of the above satellite show stop methods be used. Commonly, a clock uses a separate satellite show stop

event at the end of the clock, without using the options available on this page (see section 0).



Tip: There are ways to stop a satellite show in a clock:

- Stopping a show by a closure received from your satellite receiver.
- Stopping a show by a specific length.
- Stopping a show by the starting of another show (either within the same clock, or a subsequent hour's clock).
- Stopping a show by adding a satellite show stop event.

22. Click **Next**.

The sixth page appears in the New Satellite Show dialog box.

23. Page 6 is for macro commands you want to execute at the beginning or end of the satellite show. Uses range from sending serial strings, setting mixer levels, and turning I/O devices on or off to running other applications. For more information, see Appendix A - Macros.

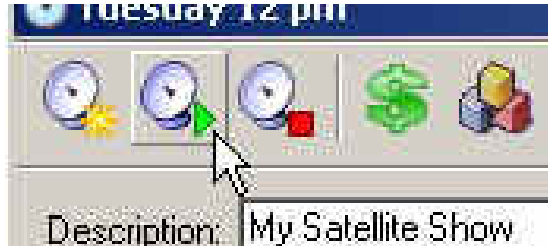
24. To add an item to either list, click the **Add**  button next to the particular list and type your desired macro command into the command window that appears.

25. If you are satisfied with your settings, click **OK**.

8.4.2 Adding an Existing Satellite Show Start Event

When you create a satellite show start event, as in the previous section, OpX One adds it to a memorized list. This makes it easy to re-use the configuration of a previously set up satellite show start event without having to “re-invent the wheel.”

The following procedure describes how to add a previously defined satellite show start event to your clock. To see examples of completed clocks, see section 8.5.



➤ To add an existing satellite show start event

1. Click the **Start Existing Satellite Show** button.

The New Start Satellite Show dialog box appears.

2. Complete the fields in the dialog box (see
- 3.
- 4.

5. Table 8-10).

Table 8-10. Fields in the New Start Satellite Show Dialog Box

| Field | Description | Default |
|--------------|---|-----------------|
| Name | Select a satellite show start event you created previously. | — |
| Cue | The cue type determines how the satellite show starts based on time or interaction with previous item execution. Under most circumstances, select Time Immediate. For a description of all available cue types, see Appendix B - Cue Types. | Audio Start [+] |
| Time – MM:SS | Select the start time of your satellite show. This usually is 00:00 for shows that start at the top of the hour. | 00:00 |

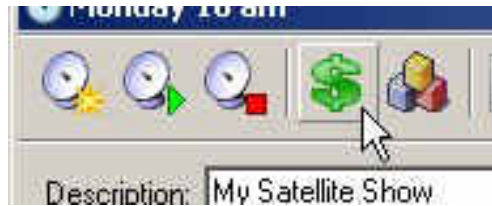
6. Click **OK** to add the event to your clock.

8.4.3 Creating a Commercial Break Event

The previous two sections described how to add a satellite show start event to turn on your satellite show at the correct time. As part of those procedures, you told OpX One what trigger the satellite show will send to start a local break. Now you need to tell OpX One when the breaks will occur, so that national breaks can be replaced with your local spots.

➤ **To create a commercial break event**

1. Click the **New Commercial Break** button.



The New Commercial Break dialog box appears.

2. Complete the fields in the dialog box (see
- 3.
- 4.
5. Table 8-11).

Table 8-11. Page 1 Fields in the New Commercial Break Dialog Box

| Field | Description | Default |
|--------------|---|--------------------------------|
| Cue | Enter the desired cue type for the break. Choices are: <ul style="list-style-type: none">• None = select for trigger-started breaks.• Time Immediate = select for most other non-triggered/non-floating breaks. For a description of all available cue types, see Appendix B - Cue Types. | None [Stop / Start By Closure] |
| Time – MM:SS | Enter the start time of the break in minutes and seconds (MM:SS format). <ul style="list-style-type: none">• For floating (trigger-started) breaks, time is an estimate of the start time of the break.• For breaks with a cue type of Time Immediate or Time Next, time is the exact start time of the break. | Audio Start [+] |
| Mandatory | Always plays break content, including the audio files added in steps 3 and 4. If Auto Fill is configured on your Audio Server, breaks that are not fully filled by your traffic software are filled automatically with the content you selected. | Selected |
| Options | Plays content only when your traffic software places spots or other content within the break. If no content is placed in this break's time period, OpX One does not replace the satellite show content with local content (or the audio files selected in step 3 or 4 below), leaving the satellite show's underlying audio on the air. | Not selected |

6. Click the **Next** button.

The second page of the New Commercial Break dialog box appears. This page allows you to have an audio file of your choosing appended to the end of your break. This means that if you have set your break to 3:00 minutes in step 2, then add a 15-second station ID file to this page, your total break time will be 3:15 minutes.

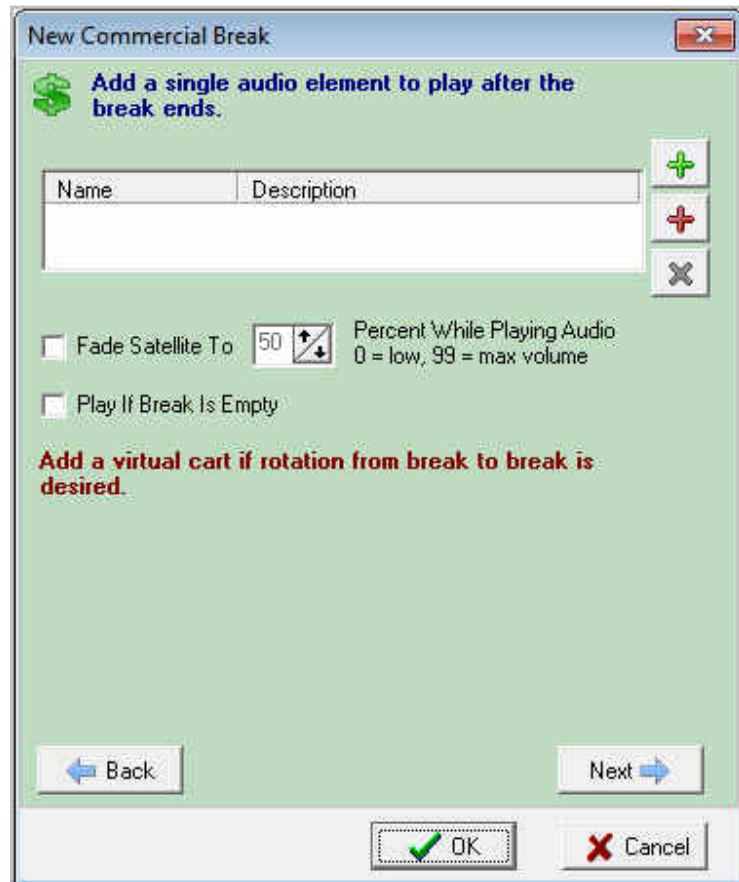





Figure 8-9. New Commercial Break Dialog Box (Pg. 2)

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7. Complete the fields in the dialog box (see Table 8-12).

Table 8-12. Page 2 Fields in the New Commercial Break Dialog Box

| Field | Description | Default |
|------------------------|--|-----------|
| Name/Description | To add an audio element, click on the Add  button. When the File Library window appears (similar to Figure 8-8 on page 224), drag and drop desired audio files to the list on this window. You can also add an audio element by typing in the name, rather than dragging and dropping, by clicking the Delete  button. To remove an audio element from the list, click the selection and click the Delete  button. | — |
| Fade To | <ul style="list-style-type: none"> Checked = the selected audio element plays over top of the satellite show, causing a ducking effect. Use the selector to the right to select the volume level of the satellite show while the audio element plays. | Checked |
| Play If Break Is Empty | <ul style="list-style-type: none"> Checked = the selected audio element plays even if the break is empty and the Optional option was selected in step 2. | Unchecked |

8. Click the **Next** button.

The third page of the New Commercial Break dialog box appears. This page allows you to specify audio elements that are added automatically to all breaks, except breaks you configure as Optional, which have not been filled in by your traffic software.

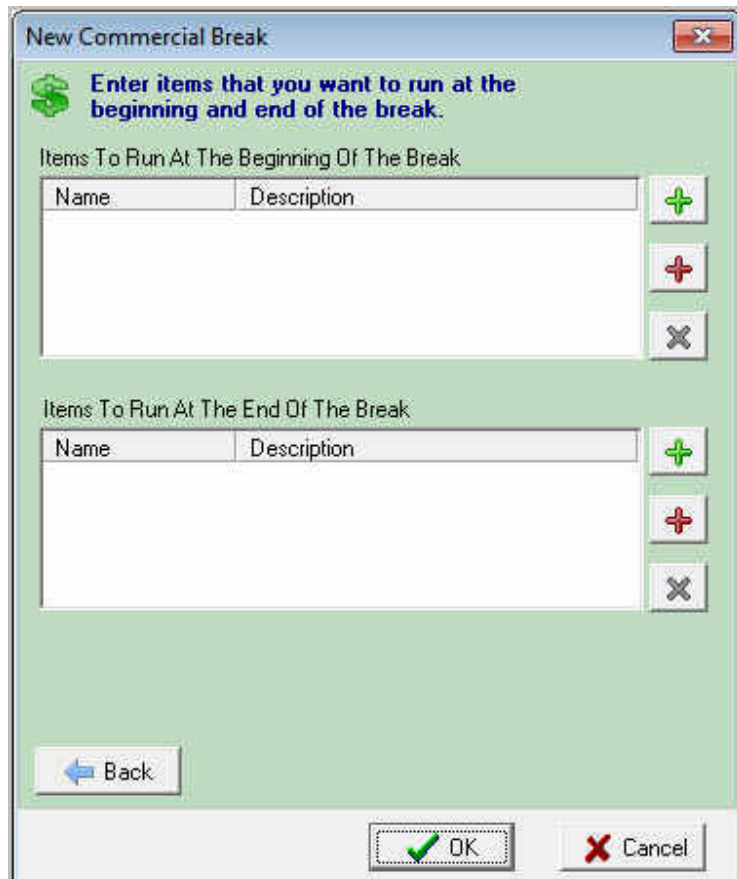





Figure 8-10. New Commercial Break Dialog Box (Page 3)

9. Complete the fields in the dialog box (see
10. Table 8-13).

Table 8-13. Page 3 Fields in the New Commercial Break Dialog Box

| Field | Description | Default |
|--|---|---------|
| Items To Run At The Beginning Of The Break | <p>To add an audio element, click on the Add  button. When the File Library window appears (similar to Figure 8-8 on page 224), drag and drop desired audio files to the list on this window.</p> <p>You can also add an audio element by typing in the name, rather than dragging and dropping, by clicking the Delete  button.</p> <p>To remove an audio element from the list, click the selection and click the Delete  button.</p> | — |
| Items To Run At The End Of The Break | | |
| | | |

11. Click **OK** to add the commercial break to your clock.
12. Repeat this procedure for each additional break you have in the hour until you build up all the breaks specified by your syndicator for your satellite show.

8.4.4 Creating a Custom Event

You can add custom events to your clock. Custom events allow the scheduling of macros, audio files, carts, or comments into your clock that are not part of a satellite show start event, commercial break, or satellite show end event. Uses of custom events range from playing station IDs, sending serial strings, setting mixer levels, turning on/off I/O devices, and running other applications to loading the log for the next day and more. You can even use custom events in clock hour-blocks that are not part of a satellite rebroadcast.

➤ **To add a custom event to your clock**

1. Click the **Add Event** button.



The New Event dialog box appears.

2. Complete the fields in the dialog box (see
3. Table 8-13).

Table 8-14. Fields in the New Event Dialog Box

| Field | Description | Default |
|--------------|---|---------|
| Cue | Determines how OpX One's automation will start your event. See Appendix B - Cue Types. | — |
| Time - MM:SS | Used with the timed cues Time Immediate and Time Next to determine when your custom event will be played. | 00:00 |

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| Field | Description | Default |
|-------------------------------|--|---------|
| Category | Select the category of your event. | — |
| Name/Macro Commands | <p>The entry you add here depends on your selection in the Category drop-down list.</p> <ul style="list-style-type: none">• Audio = enter the name of your audio file.• Comment = enter the actual comment text.• Macro = enter the macro command followed by any required or optional variables. See Appendix A - Macros.• Text = the file name is entered without extension. When this event executes, the text file opens on the Studio Client modules. This function is useful for news/weather scripts or general information. | — |
| Name Field for Macro Commands | | — |

4. Click **OK** to add your event to your clock.

8.4.5 Creating a Stop Satellite Show Event

OpX One needs to know how and when to end your satellite show, just as it needed to know how to start your show.

Stop satellite show events are needed only when transitioning from a satellite show to local audio for a live or time shift satellite show, or ending a recording for a recorded satellite show. A stop satellite show event is not needed if transitioning directly from one satellite show to another because the satellite show start event handles the ending the previous show when starting the next. To see examples of completed clocks, see section 8.5.

- To add a stop satellite show event to your clock

1. Click the **Stop Existing Satellite Show** button.

The New Stop Satellite Show dialog box appears.

2. Complete the fields in the dialog box (see
- 3.
- 4.
5. Table 8-15).



New Stop Satellite Show

Select the satellite show you want to stop.

Name

Cue

Auto Start (+)

Time - MM:SS

00:00

OK Cancel

Table 8-15. Fields in the New Stop Satellite Show Dialog Box

| Field | Description | Default |
|--------------|---|---------|
| Name | Name of the satellite show you want to end. | — |
| Cue | Type of cue for your stop satellite show event. For most situations, a stop satellite show event uses a Time Immediate cue. | — |
| Time - MM:SS | Time for the event to execute, in minutes and seconds (MM:SS) format. | 00:00 |

6. Click **OK** to add your event to your clock.

8.4.6 Creating Multi-Hour Satellite Show Clocks

The procedure is the same as for creating clocks for a multi-hour satellite show and creating singular hour satellite show clocks, except that the events you place in the set of hour-long clocks changes subtly. The difference in how you set up your clocks must take into account:

- A satellite show start event is only required in the first hour of the string of the multi-hour satellite show clocks, although adding them will not hurt in most cases.
- Satellite show stop events are not needed until the end of the last hour of the string of satellite show clocks, although adding them will not hurt in most cases.

See section 8.5.5 for an example of how a multi-hour satellite show clock is set up.

8.4.7 Recording a Satellite Show

Recording a satellite show is easy to perform using OpX One. The recording function of OpX One records the audio content and includes the contact closures/triggers received throughout the recording. As a result, recording multi-part shows is simplified compared to other automation systems. Moreover, OpX One can play back your recorded material in a completely automated fashion. You'll never again have to splice a long-form recording manually. You can even air a show live using the procedures in section 8.4 while recording it by checking the **Record** and **Live** options.

There is no need to add commercial break events to a clock that is strictly recording a satellite show. Playback of breaks is handled by the Time Shifting clock that plays back your recorded satellite show.

8.4.8 Time-Shifting a Satellite Show

For OpX One, the term "Time Shift" refers to the play back of a satellite show previously recorded by OpX One. When you record a satellite show with the clock builder's recording functions, the triggers received are also recorded (see section 8.4). This allows OpX One to play back a recorded show with dynamically inserted spots and/or liners, jingles, and so on. Now you can record a show and play it back at a later date, with local spots inserted, without any complicated commands or manual audio file editing or splitting. OpX One does it all for you.

The procedure is nearly the same for creating a time shifted satellite show clock and creating a clock for a live satellite show (section 8.4 describes how to configure a clock for live satellite shows). The major difference is that the satellite show start event uses the **Time Shift** option to play a previously recorded satellite show rather than airing live content from your satellite receiver. All other configuration steps for setting up your closure device, commercial break events, and so on are exactly the same as setting up a live satellite show.

Other than the following procedure, setting up a time-shifted show is the same as the procedure in section 8.4.1.

1. Perform steps 1 through 9 in section 8.4.1.
2. At step 10, add the `TIMESHIFT` macro to the **Additional Commands To Run At Start Of Show** section. This command prompts your recorded file to play and allows you to specify your recorded file using meta variables.

To add the `TIMESHIFT` command:

- a. Click the **Add Event** button to the right of the **Additional Commands To Run At Start Of Show** field.
- b. Enter the command that specifies your recorded show to the **Macro Command** field of the Command window that pops up (for more information about the `TIMESHIFT` macro, see Appendix A - Macros).
- c. Click **OK**.

The example shown in Figure 8-11 has a macro that specifies an audio file with the text **roshlimberg** followed by the current date. To put it another way, if today's date is December 23, 2008, the audio file **roshlimberg122308.wav** will be played.

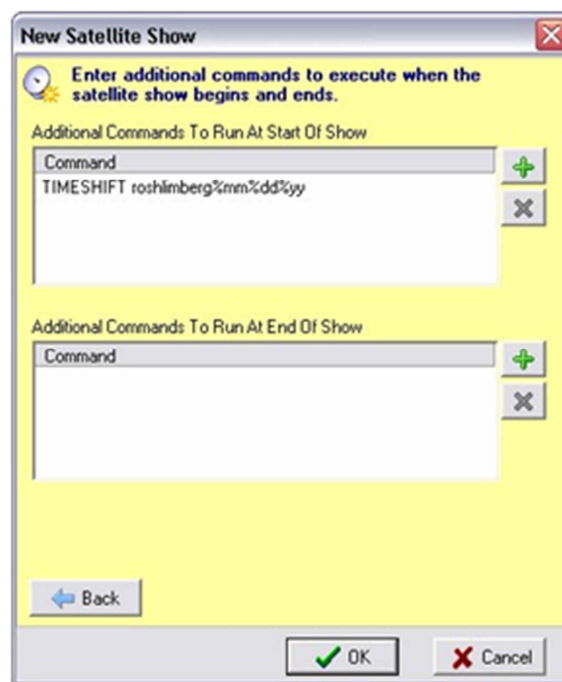


Figure 8-11. Example of Using the `TIMESHIFT` Macro

8.5 Sample Clocks

The previous sections describe how to create clocks. This section provides examples of clocks used for different purposes.

8.5.1 Satellite Talk Show with Top-Of-The-Hour News Example

It is common to use a news service at the top of the hour for the first 5-to-6 minutes of the hour. The example in Figure 8-12 shows a clock that contains a top-of-the-hour news broadcast with its break followed by a switch to a second satellite show.

Specifically, this clock contains a satellite show start event to:

- Switch to news, and then
- At 5 minutes past, play a local spot using a time immediate cued commercial break event, followed by.
- A satellite show start event for the rest of the hour's satellite show with its break events.

The stop satellite show event is set with an auto start cue type. This forces the satellite show to stop automatically at the break just before it finishes playing.

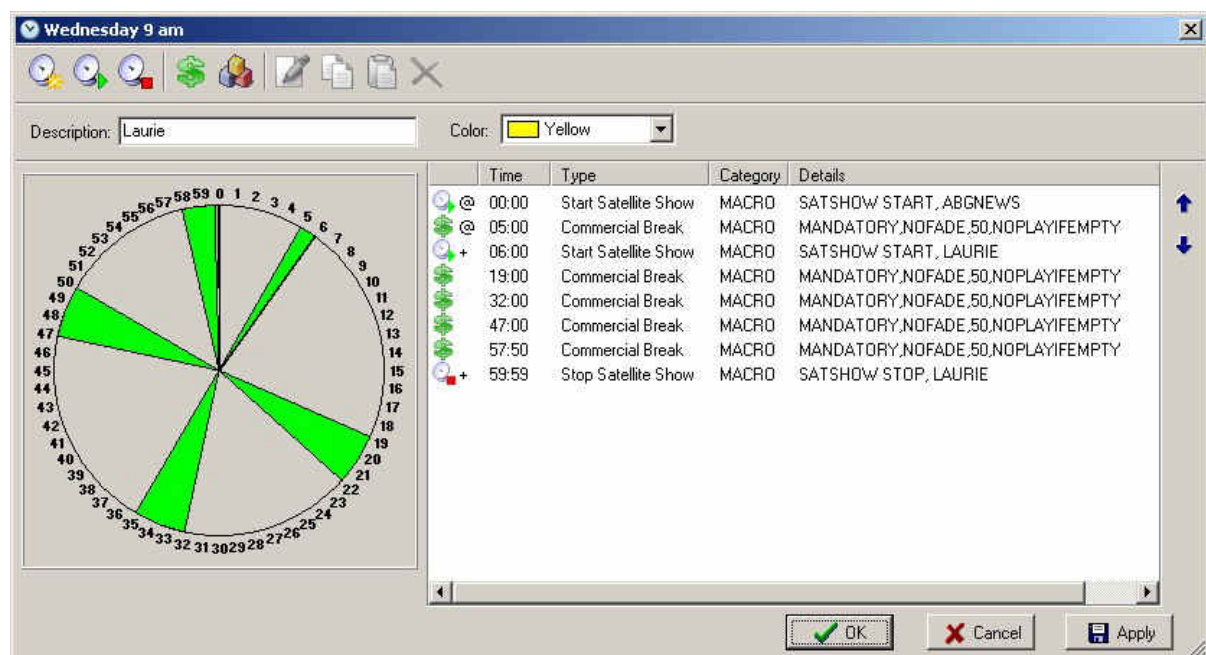


Figure 8-12. Sample Clock Containing a Top-of-the-Hour News Broadcast

8.5.2 Satellite Music Show Example

This example shows a simple music from satellite show. There is no top-of-the-hour news to worry about and there are four breaks started by trigger.

- At 59:50 past the hour, an audio event for “TOH Jingle” (top of the hour jingle) has been added as a time immediate event. This forces the top-of-the-hour jingle to play, no matter what else is going on.
- The stop satellite show event has a cue type of Auto Start, which means that it will execute automatically as soon as the top of the hour jingle has played.

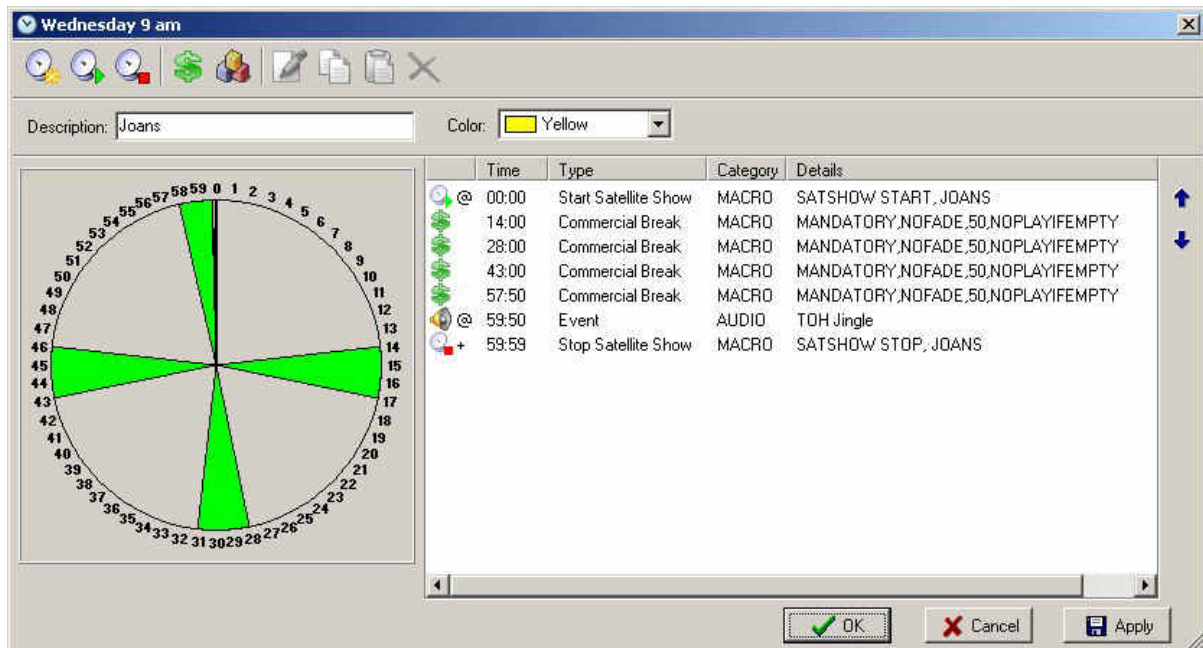


Figure 8-13. Satellite Music Show Example

8.5.3 Background Recording Example

Setting up a clock for recording is simple. As shown in the clock in Figure 8-14, all you need to add is the `satellite show start` command to start the recording and the `End Satellite Show` command to stop the recording. This example uses the auxiliary Audio Server, so there is only the recording function taking place. The triggers are recorded automatically along with the audio, so there is no need to configure anything for breaks or other events when recording.

To record a show while also airing it live, set up your satellite show start event for your live show, enabling both the **Live** option and the **Recording** option (see section 8.4.1).

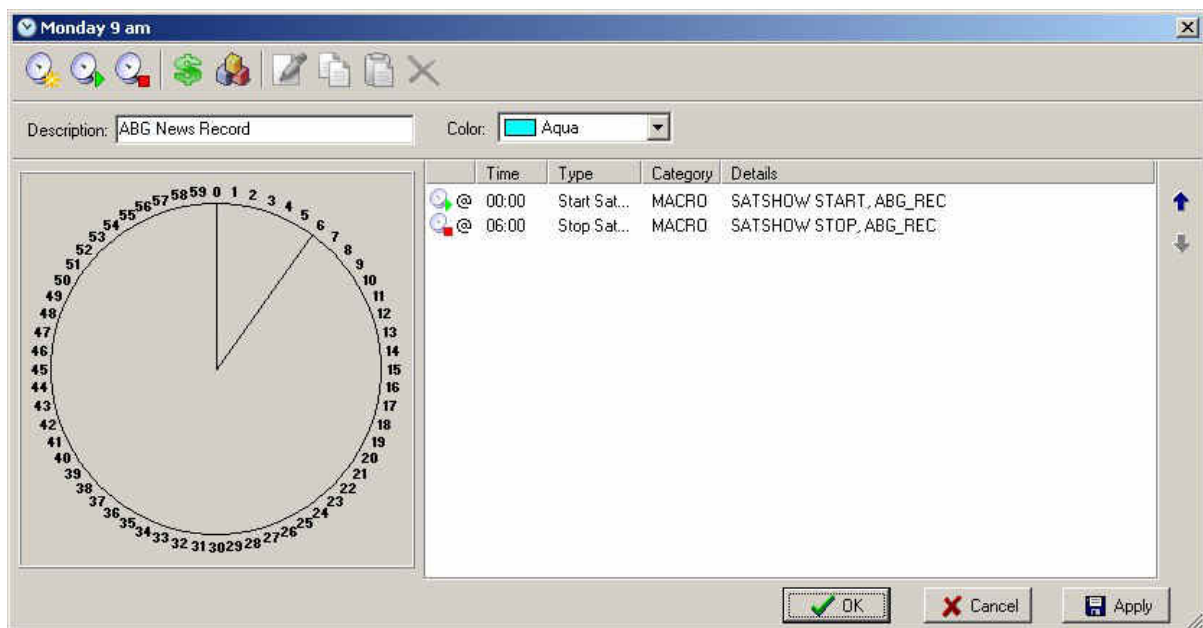


Figure 8-14. Background Recording Example

8.5.4 Time-Shift Playback Example

“Time shifting” refers to the playback of a previously recorded satellite show (see section 8.4.7 for setup instructions). A full satellite show including breaks is configured as if it was a live satellite show. The only differences is that the satellite show start events in this hour’s clock specify “Record” as the show type, and after the satellite show start events, the `TIMESHIFT` macro has been inserted that references the recorded show to be played (the `TIMESHIFT` macro is the mechanism that starts the playback of the recording).

Figure 8-15 shows an example of a clock configured to play back a previously recorded satellite show.

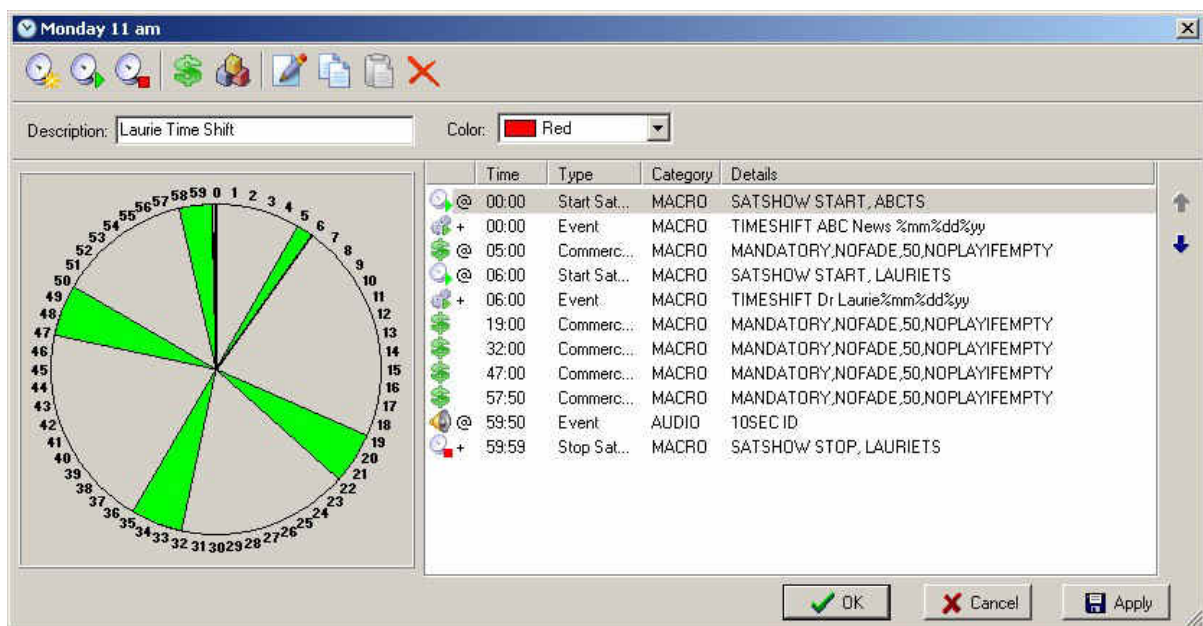


Figure 8-15. Time Shift Playback Example

8.5.5 Multi-Hour Satellite Show Example

Multi-hour satellite programs are common. Handling them in OpX One is nearly the same as handling single-hour satellite programs.

This example shows a 3-hour-long satellite program. Since each OpX One clock accounts for one hour, we create three clocks.

- In Figure 8-16, Figure 8-17, and Figure 8-18, each hour is nearly identical, except for the first two hours not containing a stop satellite show event, while the third hour does.
- The last event in hours 1 and 2 is a Station ID cart event (which your show may or may not require, as this is a situational example) with a time immediate cue, while that same event has an autostart cue in the third hour. This is because the stop satellite show event has a time immediate cue with the station ID cart event automatically starting after that event because of its autostart cue.

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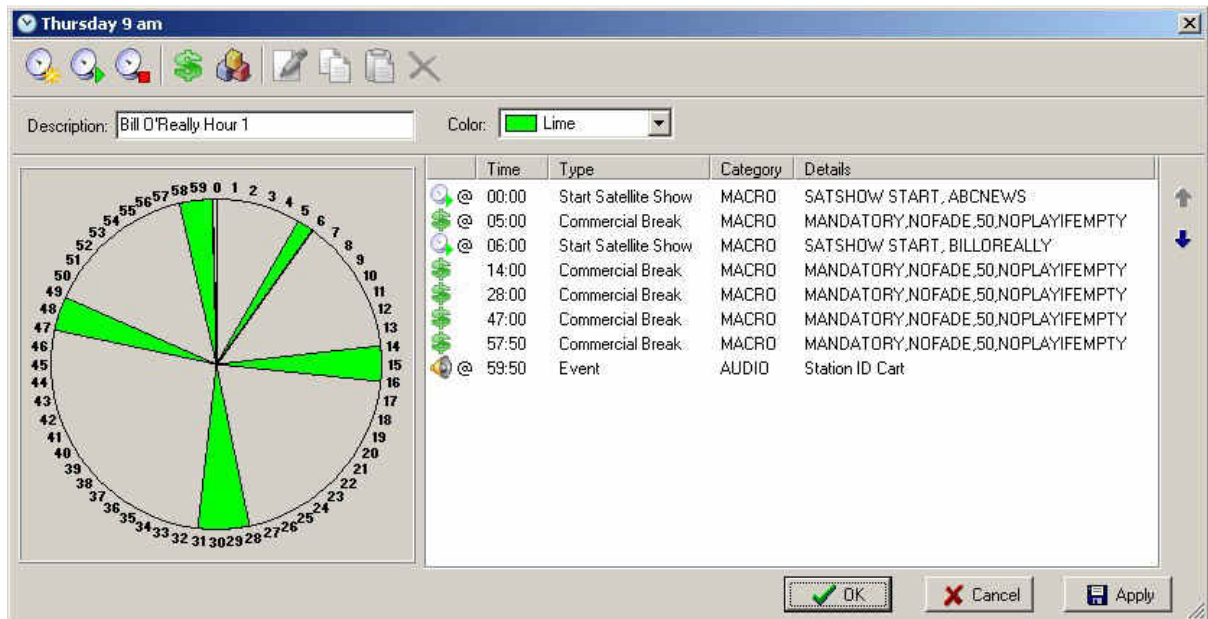


Figure 8-16. Hour One of a Multi-hour Satellite Show Example

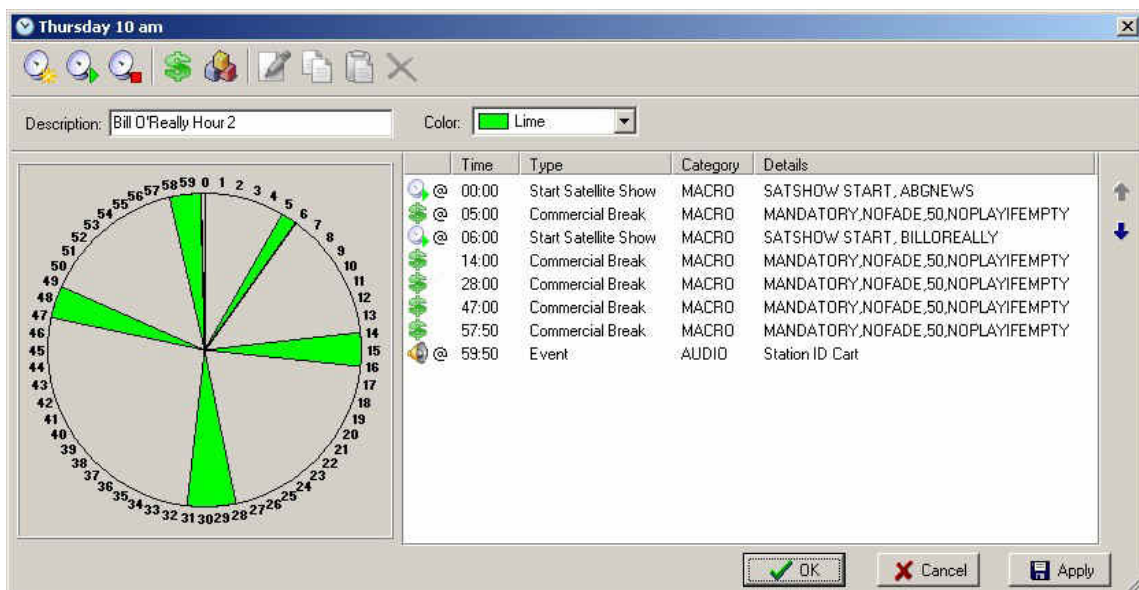


Figure 8-17. Hour Two of a Multi-hour Satellite Show Example

Clock Builder Module

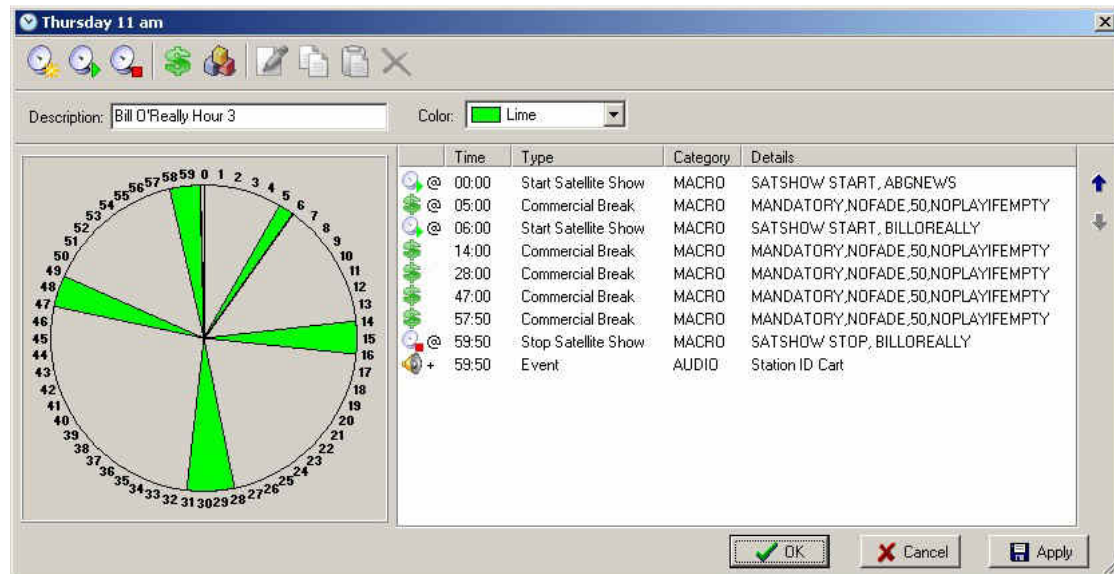


Figure 8-18. Hour Three of a Multi-hour Satellite Show Example

8.5.6 Utility Tasks without Satellite Show Audio Example

There are many instances where you might want to put utility tasks into your daily log, without having to worry about putting them into your traffic or music log software before importing into OpX One. You can use the clock builder for these “set-it-and-forget-it” tasks.

The example in Figure 8-19 shows a clock for the last hour of the day that contains only a macro that tells the OpX One Audio Server to load the log for the next day.

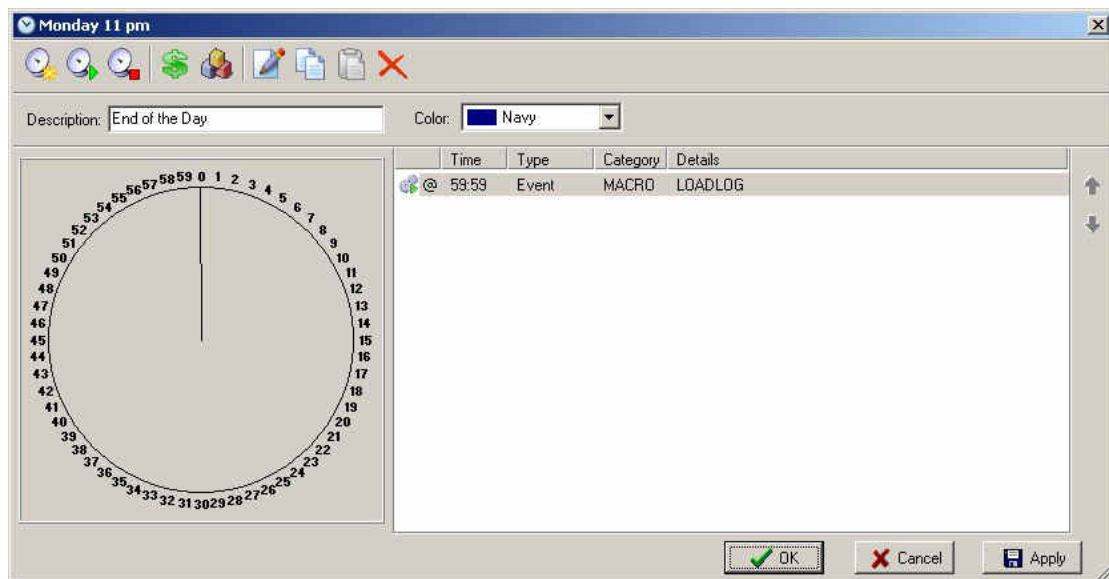


Figure 8-19. Utility Tasks without Satellite Show Audio Example

9 Import-Merge Module

Topics:

- ⤴ *Starting the Import-Merge Module (page 248)*
- ⤴ *Quick Tour (page 249)*
- ⤴ *Third-Party Log Requirements for Importing (page 255)*
- ⤴ *Configuring the Import – Merge Module (page 256)*
- ⤴ *Importing Program Logs (page 270)*
- ⤴
- ⤴ *Manually Adding and Editing Program Log Events (page 274)*
- ⤴ *Working with Carts (page 277)*

This chapter describes the OpX One Import-Merge module.

The Import-Merge module is used to import program logs from traffic- and music log-generating software, and merge them into a single log along with your clocks generated with OpX One's Clock Builder.

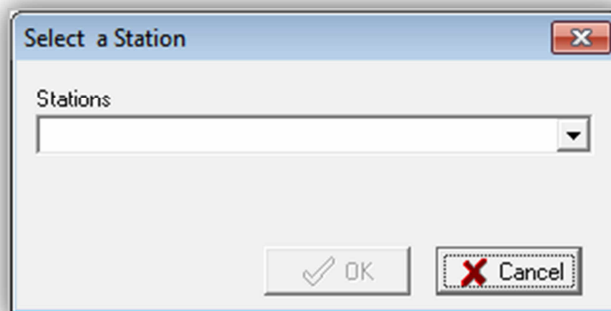
9.1 Starting the Import-Merge Module

You must start the File Server module before you start the OpX One Import-Merge module.

➤ **To start the Import-Merge module**

1. Start the File Server module (see section 3.1).
2. Click the Windows Start button and click **Programs > Broadcast Software > Import-Merge**.

You are prompted to select a station.

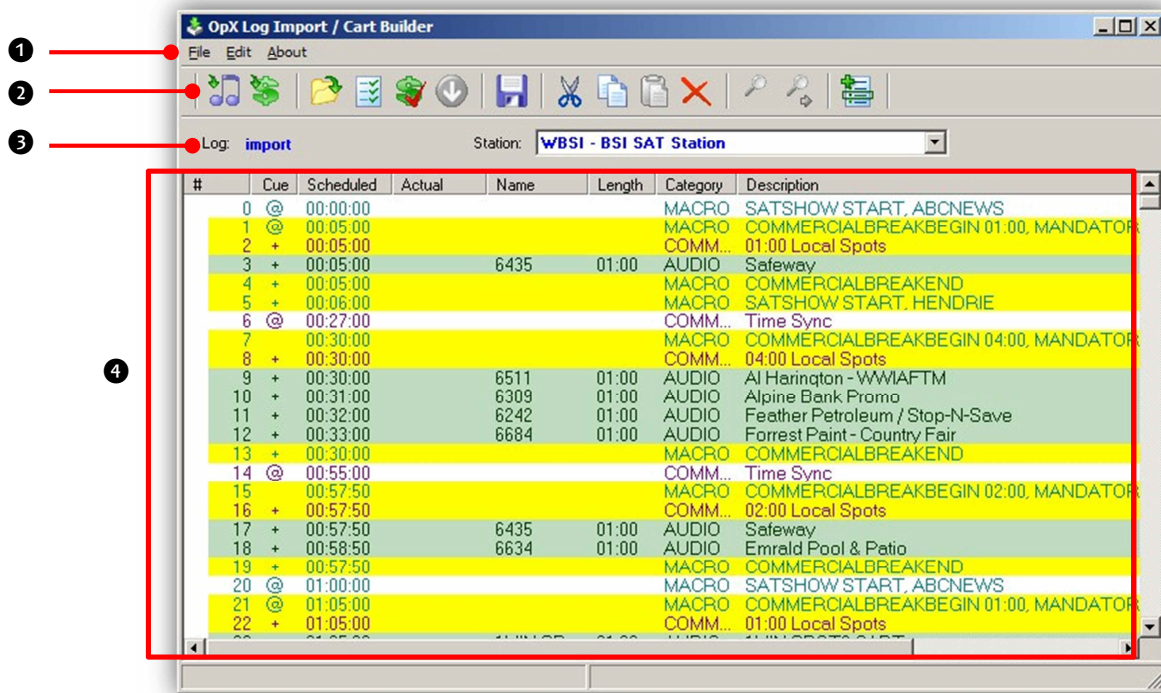


3. Using the **Stations** drop-down list, click a station.
4. Click **OK**.

The Import-Merge module is populated with the information from the selected station.

9.2 Quick Tour

The following sections provide a quick tour of the Import-Merge module interface.

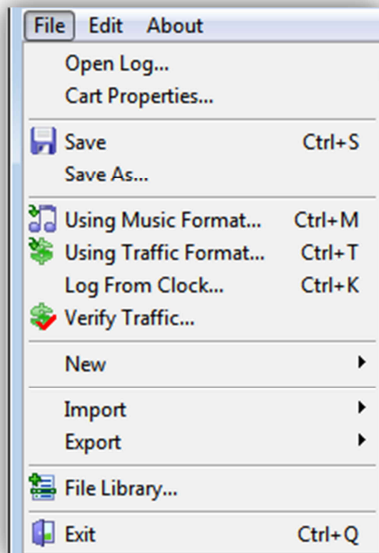


| Number | Description |
|--------|---|
| 1 | Menu bar. See section 9.2.1 |
| 2 | Tool bar. See section 9.2.2. |
| 3 | Log name and station selector. See section 9.2.3. |
| 4 | Program log display. See section 9.2.4. |

9.2.1 Import-Merge Module Menu Bar

The menu bar appears at the top of the Import-Merge window. The following sections describe the menus on the menu bar.

9.2.1.1 File Menu



Open Log = opens a program log so you can re-import traffic or modify the log.

Cart Properties = sets Artist/Advertiser and Title/Description information, as well as the average length.

Save = saves the current file.

Save As = saves the current file under a different name and/or location.

Using Music Format = imports from your Music Log software See section 9.5.1.

Using Traffic Format = imports from your Traffic Log software See section 9.5.2.

Log From Clock = imports data from the clocks you created using the Clock Builder Module into your program log.

Verify Traffic = checks the traffic event expire dates and file existence in your log.

New = creates a new program log or cart

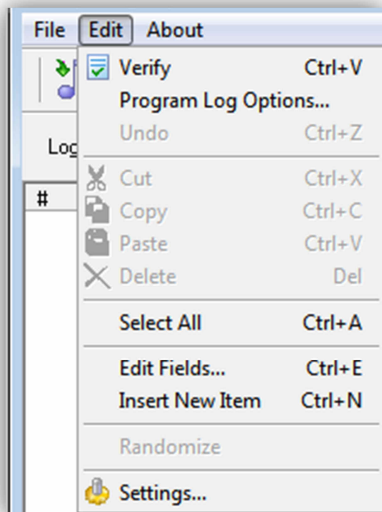
Import = imports music, traffic, alternate, CSV, and XML formats. See section 9.5.

Export = exports music, traffic, alternate, CSV, and XML formats. Also, allows you to save your log to your file server. See section 9.6.

File Library = adds events to your program log. See section 9.7.1.

Exit = exits the Import-Merge Module.

9.2.1.2 Edit Menu



Verify = checks your program log for errors or missing files.

Program Log Options = opens a calendar with dates you can click to see options configured for a particular day.

Undo = reverts to the version before you last saved the current file (helpful when you make an error while creating or editing a program).

Cut = removes the highlighted event from your program log and copies it to the Windows' Clipboard.

Copy = copies the highlighted event to the Windows' Clipboard.

Paste = pastes a cut or copied event from the Windows' Clipboard under the currently highlighted item in your program log.

Delete = removes an event from your program log, highlight it and choose this menu option. This option is similar to the Cut option, but the event is not copied to your Windows' Clipboard.

Select All = highlights all events in the program log. This option can be used with the Cut, Copy, Paste, and Delete menu options

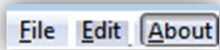
Edit Fields = edits the fields of the highlighted event in the program log. This is useful when you want to correct a mistake or slightly modify an existing entry.

Insert New Item = to add a new item to your program log, highlight the event in the program log previous to the location where you want to add your new event, and then click this menu option. You can then manually enter the command of your choice.

Randomize = randomize carts. This option is available when creating carts, not when creating program logs.

Settings = accesses the Import – Merge Module configuration settings and adds events to your program log.

9.2.1.3 About Menu



Opens a window that shows the version and build date of the Import-Merge module you are running. This window also shows the amount of memory and virtual memory being used, and the amount of time that the File Manager module has been running. See Figure 9-1 for an example. To close the window, click **OK**.

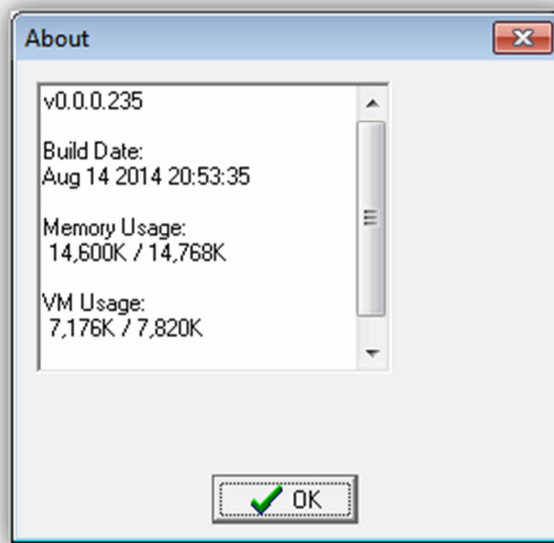


Figure 9-1. Example of About Information

Import-Merge Module















9.2.2 Tool Bar

The Import-Merge module tool bar appears below the menu bar.



Table 9-1 describes the tools on the tool bar.

Table 9-1. Import-Merge Module Tool Bar

| Tool | Tool Name | Description | Tool | Tool Name | Description |
|---|-----------------------------|---|---|--------------|---|
|  | Import Using Music Format | Imports from your music log software. |  | Cut | Removes the highlighted event from your program log and copies it to the Windows' Clipboard. |
|  | Import Using Traffic Format | Imports from your traffic log software. |  | Copy | Copies the highlighted event from your program log to the Windows' Clipboard. |
|  | Open Log From Server | Opens and modifies a log that has been saved to the File Server. |  | Paste | Pastes a cut or copied event from the Clipboard to the item below the highlighted item in your program log. |
|  | Verify Program Log | Checks your program log for errors or missing files. |  | Delete | Removes an event from your program log. |
|  | Verify Traffic Log | Checks a traffic log for missing or out-of-date audio files without importing it. |  | Find | Finds an event in your program log using the criteria you specify. |
|  | Go To Next Error | Finds errors in the program log marked in red by the Program Log option. |  | Find Again | Finds the next instance of an event with the search criteria used with the Find option. |
|  | Save To OpX One Server | Saves the program log to the File Server. |  | File Library | Adds events to your program log. |

9.2.3 Log Name and Station Selector

The log name and station selector appear below the tool bar.

Table 9-1 describes the tools on the tool bar.



Figure 9-2. Log Name and Station Selector

Table 9-2. Import-Merge Module Log Name and Station Selector

| Number | Description |
|--------|--|
| 1 | Name of the open program log. Your OpX One program log is automatically named with the file name of the first imported item. For example, if you import a traffic log named "041208.log", your OpX One log automatically inherits "041208.xml" as its file name. |
| 2 | The station you are creating logs for is determined by the station selected in this drop-down list. In the figure above, logs are being created for the station "WOPX ONE", with the configuration settings (import format settings, log locations, and so on) particular to the WOPX ONE station. |

9.2.4 Program Log Display

The program log display shows the program log events as they are imported. It uses the same display formatting as the Audio Server Module's program log display.

| # | Cue | Scheduled | Actual | Name | Length | Category | Description |
|----|-----|-----------|--------|------|--------|----------|--------------------------------------|
| 0 | @ | 00:00:00 | | | | MACRO | SATSHOW START, ABCNEWS |
| 1 | @ | 00:05:00 | | | | MACRO | COMMERCIALBREAKBEGIN 01:00, MANDATOR |
| 2 | + | 00:05:00 | | | | COMM... | 01:00 Local Spots |
| 3 | + | 00:05:00 | 6435 | | 01:00 | AUDIO | Safeway |
| 4 | + | 00:05:00 | | | | MACRO | COMMERCIALBREAKEND |
| 5 | + | 00:06:00 | | | | MACRO | SATSHOW START, HENDRIE |
| 6 | @ | 00:27:00 | | | | COMM... | Time Sync |
| 7 | + | 00:30:00 | | | | MACRO | COMMERCIALBREAKBEGIN 04:00, MANDATOR |
| 8 | + | 00:30:00 | | | | COMM... | 04:00 Local Spots |
| 9 | + | 00:30:00 | 6511 | | 01:00 | AUDIO | Al Harrington - WWIAFTM |
| 10 | + | 00:31:00 | 6309 | | 01:00 | AUDIO | Alpine Bank Promo |
| 11 | + | 00:32:00 | 6242 | | 01:00 | AUDIO | Feather Petroleum / Stop-N-Save |
| 12 | + | 00:33:00 | 6664 | | 01:00 | AUDIO | Forrest Paint - Country Fair |
| 13 | + | 00:30:00 | | | | MACRO | COMMERCIALBREAKEND |
| 14 | @ | 00:55:00 | | | | COMM... | Time Sync |
| 15 | + | 00:57:50 | | | | MACRO | COMMERCIALBREAKBEGIN 02:00, MANDATOR |
| 16 | + | 00:57:50 | | | | COMM... | 02:00 Local Spots |
| 17 | + | 00:57:50 | 6435 | | 01:00 | AUDIO | Safeway |
| 18 | + | 00:58:50 | 6634 | | 01:00 | AUDIO | Emerald Pool & Patio |
| 19 | + | 00:57:50 | | | | MACRO | COMMERCIALBREAKEND |
| 20 | @ | 01:00:00 | | | | MACRO | SATSHOW START, ABCNEWS |
| 21 | @ | 01:05:00 | | | | MACRO | COMMERCIALBREAKBEGIN 01:00, MANDATOR |
| 22 | + | 01:05:00 | | | | COMM... | 01:00 Local Spots |

Figure 9-3. Program Log Display

9.3 Third-Party Log Requirements for Importing

The program logs you want to import into OpX One must meet the following requirements.

- Files must either be delimited or in position-dependent ASCII text format
- Each break/stop set must contain a signifying event as the first event of the break, such as a comment of `BREAK START`, `STOPSET`, or `$$COMMERCIALS$$`. You configure the Import – Merge module to recognize your marker text, so it is actual text does not matter as long as it is consistent.
- At a minimum, every event must contain a scheduled time for each event, a category, and a file name (without file extension) for audio events.
- If combining a music log, traffic log, and clocks (from the OpX One Clock Builder), ensure that each log/clock has the same number of breaks scheduled at corresponding times.

9.4 Configuring the Import – Merge Module

Configuration of the Import – Merge module is critical. In particular, the import format settings must be accurate for import operations to work properly. The following sections describe how to configure the Import – Merge module.



Note: Many settings are available only on the Import-Merge module on the File Server. To access these settings on a different system, you must import the settings from the File Server to the new machine using the **Restore from File Server** button (see the figure in section 9.4.2).

➤ **To configure the Import – Merge module settings**

1. On the **Edit** menu, click **Settings**.

*The Settings dialog box appears, with the **General** tab displayed.*

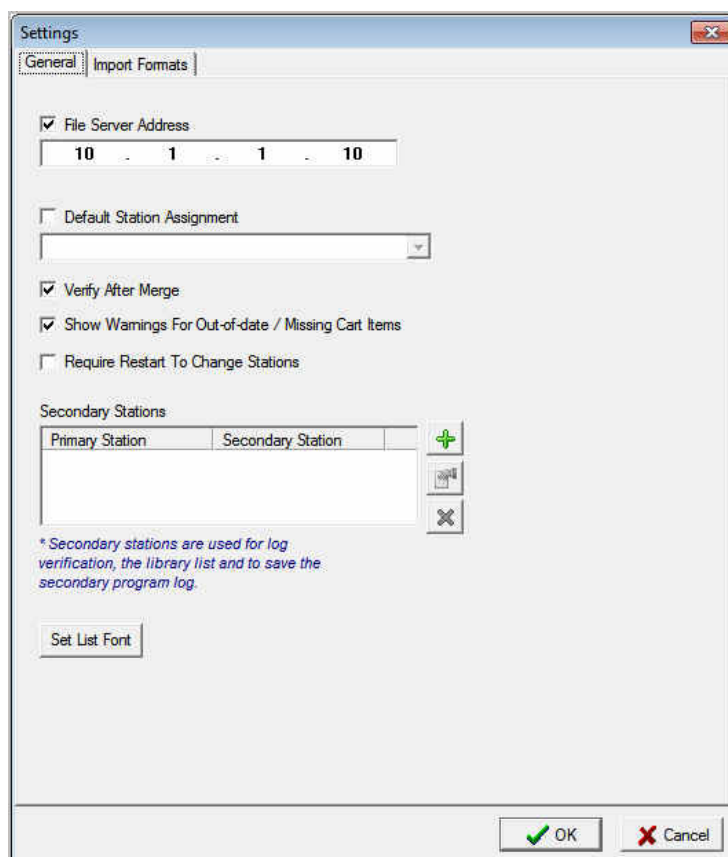


Figure 9-4. Settings Dialog Box with General Tab Displayed

Import-Merge Module

2. Complete the fields in the dialog box tabs.
3. When you finish, click the **OK** button.

9.4.1 General Configuration Settings

Figure 9-5 shows the field in the **General** tab and Table 9-3 describes them.

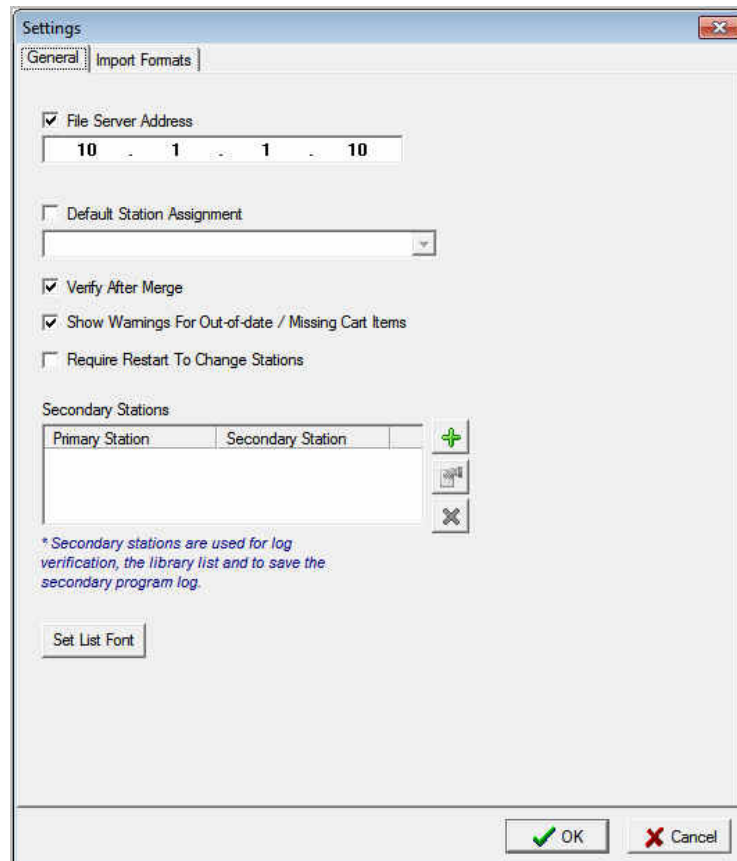


Figure 9-5. General Tab

Table 9-3. Fields in the General Tab

| Field | Description | Default |
|----------------------------|--|-----------|
| File Server Address | <ul style="list-style-type: none">• Unchecked = Import – Merge module searches your network for the OpX One File Server.• Checked = Import – Merge module uses the IP address specified to find the OpX One File Server. This can speed up start-up time or aid your computer in finding the OpX One File Server. | 10.1.1.10 |
| Default Station Assignment | <ul style="list-style-type: none">• Unchecked = you must select your desired station each time you open the Import-Merge module.• Checked = specify one of your stations to load automatically when opening the Import – Merge module. | Unchecked |
| Verify After Merge | Check this check box to have the system check for duplicate files and valid air dates as program logs are being imported into the system. | Checked |

Import-Merge Module

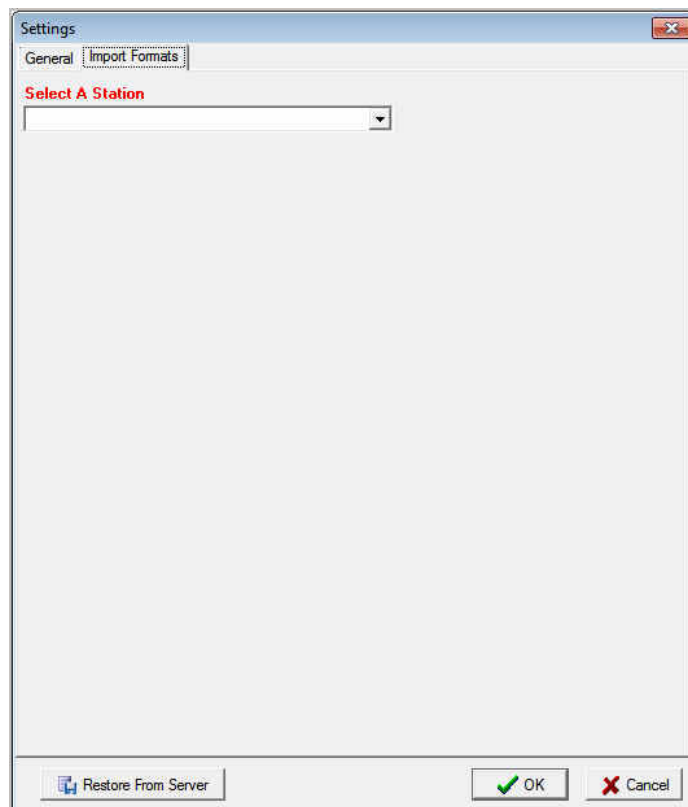
| Field | Description | Default |
|--|--|-----------|
| Show Warnings For Out-of-date/Missing Cart Items | Check this check box to have the system generate an error message if it finds a cart of items (such as commercials) that are out of date. | Checked |
| Require Restart To Change Stations | Check this check box to force the Import-Merge module to be restarted before the station can be changed. | Unchecked |
| Secondary Stations | If you import program logs or virtual/nonexistent stations whose libraries reside on another station, this field allows verification to be performed by the secondary station. | — |
| Set List Font | Allows you to select the typeface for the Import-Merge module interface. | — |

9.4.2 Import Formats Configuration Settings

The **Import Formats** tab allows you to define the settings for files you will import into the OpX One system.

1. Click the **Import Formats** tab.

A tab similar to the following appears.



2. Using the **Select A Station** drop-down list, click the station whose import format settings you want to configure. The import formats you select are particular to each station.

*The **Import Formats** tab gets populated with fields and buttons (see Figure 9-6).*

Import-Merge Module

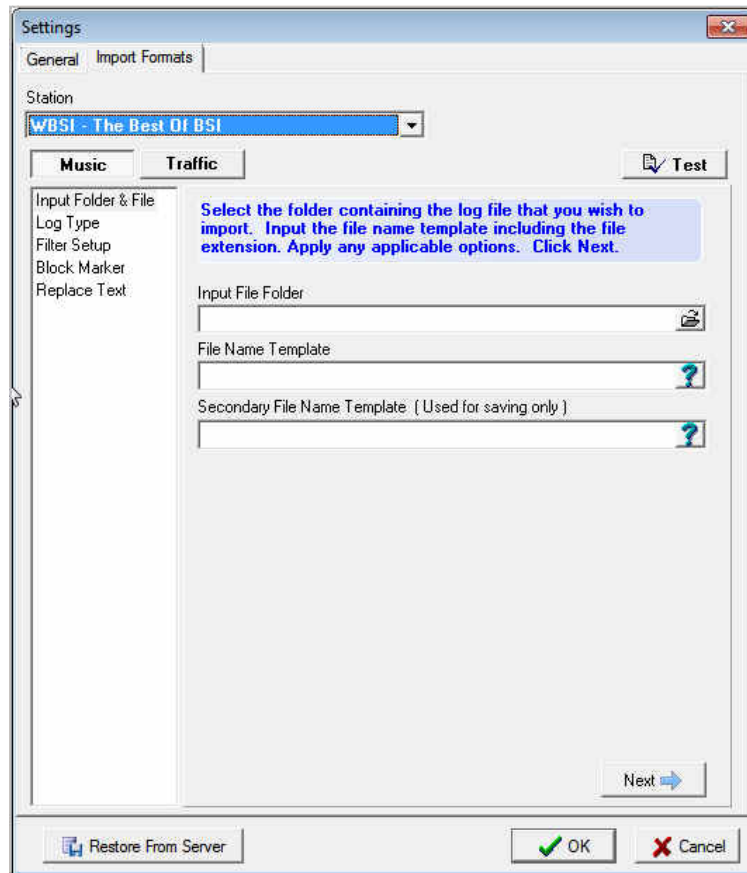


Figure 9-6. Input File Folder and File Settings

3. Click the type you want to configure or modify. There are three types of import format definitions for each station:
 - Music
 - Traffic
 - Alternate import format definition
4. Complete the remaining fields in the **Import Formats** tab (see Table 9-4).
5. If desired, click the **Test** button to test your settings.
6. Proceed to section 9.4.3.

Import-Merge Module

Table 9-4. Fields in the Import Formats Tab

| Field | Description | Default |
|--------------------|--|---------|
| Input File Folder | Enter the path to the directory where you save your traffic/music log software export files. Alternatively, click the Browse to Folder button on the far right side of the field and select the file. | — |
| File Name Template | <p>Enter the naming format of your log. This can be either static text (such as “mylog.txt”) or meta-variables so OpX One will automatically recognize date/day specific log names. The meta-variables convert to the current day/date automatically (using your workstation’s date and time) in the following formats:</p> <ul style="list-style-type: none">• %yy Year as a 2-digit number. Examples: For 2009, replace %yy with “09”. For 2016, replace %yy with “16”.• %yyyy Year as a 4-digit number. Example: For 2016, replace %yyyy with “2016”.• %m Month as a 1- or 2-digit number without a leading zero. Examples: For June, replace %m with “6”. For November, replace %m with “11”.• %mm Month as a 2-digit number with a leading zero. Examples: For July, replace %mm with “07”. For October, replace %mm with “10”.• %mmm Month as a 3-letter abbreviation. Example: For November, replace %mmm with “Nov”.• %mmmm Month as a full name. Example: For August, replace %mmmm with “August”.• %d Day as a 1- or 2-digit number without a leading zero. Examples: For the 5th, replace %d with “5.” For the 12th, replace %d with “12”.• %dd Day as a 2-digit number with a leading zero Examples: For the 7th, replace %d with “07”. For the 24th, replace %d with “24”.• %ddd Day as a 3-letter abbreviation. Example: For Tuesday, replace %ddd with “Tue”.• %dddd Day as a full name. Example: For Friday, replace %dddd with “Friday”. <p>Figure 9-7 on page 261 shows an example of using meta-variables to represent a log naming convention that uses the month, day, and year as 2-digit numbers. This means that when you import your log for the next day by selecting “Tomorrow” during the import process described later in this chapter, on December 23, 2008, OpX One looks automatically for a log file named “122408.log”.</p> <p>Another example, if your traffic log-generating software created a file that looked like “122308t1.txt”, you enter %mm%dd%yyt1.txt into the File Name Template field. OpX One treats any character that is not part of a valid meta- variable as literal text. In this example, “t1” is not a meta-variable and is included as part of the file name.</p> | — |

9.4.3 Log Type Configuration Settings

1. Click the **Next** button or click **Log Type** in the left pane.

The settings in Figure 9-7 appear.

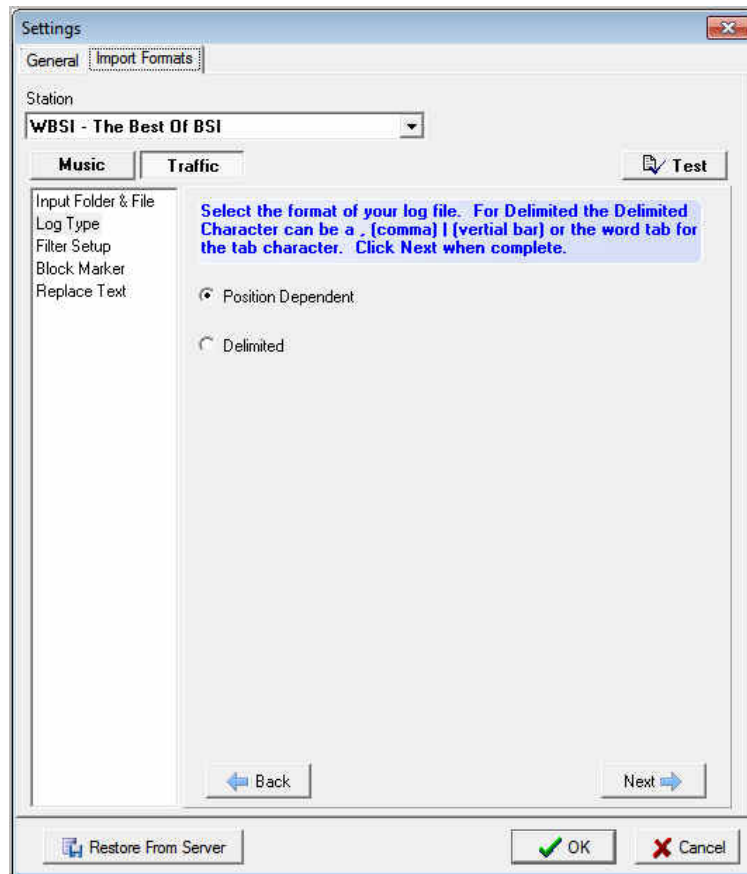


Figure 9-7. Log Type Settings

2. Click the format of your logs (**Position Dependent** or **Delimited**). See sections 9.4.3.1 and 9.4.3.2 to determine whether your music and traffic logs are in position-dependent or delimited format. Then proceed to the appropriate step:
 - If the log is in position-dependent format, click the **Next** button or click **File Setup** in the left pane. Proceed to step 3 below.
 - If the log is in delimited format, click the **Next** button or click **File Setup** in the left pane, and then enter the character used by your log-generation software to differentiate between its various fields. Proceed to step 4 on page 262.
3. When configuring a position-dependent import format, the settings in Figure 9-8 allow you to enter the position and length of each piece of data from your log. Enter the starting character position of each field type into the Start column, and the total length of the field into the Length column. Use the **Scheduled Format** and **Length Format** fields to specify the time format your import file gives in the **Scheduled** and **Length** fields.

Import-Merge Module

- hh = hour digits
- mm = minutes digits
- ss = seconds digits
- A/P = 12-hour time (AM or PM)
- Other options are in 24 hour format.

The screenshot shows the 'Settings' dialog box with the 'Import Formats' tab selected. The 'Station' dropdown is set to 'WOPX - The Best Rock!'. The 'Music' tab is active, and the 'Test' button is visible. On the left, a list of options includes 'Input Folder & File', 'Log Type', 'Filter Setup', 'Block Marker', and 'Replace Text'. The main area contains a blue instruction box: 'Input Start and Length for position dependent format or Position for Delimited. Click Next when complete.' Below this, there are two columns of input fields: 'Start' and 'Length'. The 'Start' column has fields for 'Cue' (1), 'Scheduled' (2), 'Scheduled Format' (hh:mm:ss), 'File Name' (10), 'File Name Leading Char' (empty), 'Length' (18), 'Length Format' (mm:ss), 'Category' (23), 'Description 1' (31), and 'Description 2' (0). The 'Length' column has fields for 'Cue' (1), 'Scheduled' (8), 'File Name' (8), 'Length' (5), 'Category' (8), 'Description 1' (50), and 'Description 2' (0). A checkbox 'Add Auto Step Cue "+" to all events' is at the bottom. 'Back' and 'Next' buttons are at the bottom of the main area. At the very bottom are 'Restore From Server', 'OK', and 'Cancel' buttons.

| | Start | Length |
|------------------------|----------|--------|
| Cue | 1 | 1 |
| Scheduled | 2 | 8 |
| Scheduled Format | hh:mm:ss | |
| File Name | 10 | 8 |
| File Name Leading Char | | |
| Length | 18 | 5 |
| Length Format | mm:ss | |
| Category | 23 | 8 |
| Description 1 | 31 | 50 |
| Description 2 | 0 | 0 |

Figure 9-8. Example of Configuring a Position-Dependent Import Format

4. When configuring a delimited import format, enter the field order of each piece of data from your log (see Figure 9-9). Enter the field number of each field type into each corresponding **Position** field. Use the **Scheduled Format** and **length Format** fields to specify the time format your import file gives in the **Scheduled** and **Length** fields.
 - hh = hour digits
 - mm = minutes digits
 - ss = seconds digits
 - A/P = 12-hour time (AM or PM)
 - Other options are in 24 hour format.

Import-Merge Module

The screenshot shows the 'Settings' dialog box with the 'Import Formats' tab selected. The 'Station' dropdown is set to 'WOPX - The Best Rock!'. The 'Music' tab is active. On the left, a list of options includes 'Input Folder & File', 'Log Type', 'Filter Setup', 'Block Marker', and 'Replace Text'. The main area contains a blue instruction box: 'Input Start and Length for position dependent format or Position for Delimited. Click Next when complete.' Below this, there are input fields for 'Cue' (1), 'Scheduled' (2), 'Scheduled Format' (hh:mm:ss), 'File Name' (3), 'File Name Leading Char', 'Length' (4), 'Length Format' (mm:ss), 'Category' (5), 'Description 1' (6), and 'Description 2' (7). A checkbox 'Add Auto Step Cue "+" to all events' is present. A 'Test' button is in the top right. 'Back' and 'Next' buttons are at the bottom. At the very bottom are 'Restore From Server', 'OK', and 'Cancel' buttons.

Figure 9-9. Example of Configuring a Delimited Import Format

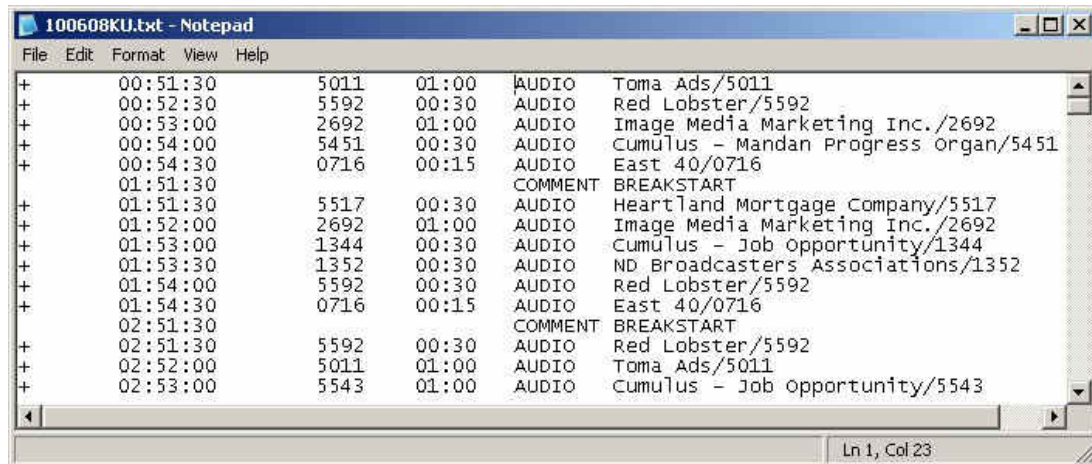
5. Proceed to section 9.4.3.

9.4.3.1 Position-Dependent Format

Position-dependent program logs such as the one in Figure 9-10 are organized with the various pieces of data in nice columns that are easy for people (not just computers) to read. Each column starts at the same position on each line when you count the characters from the left side and each column always contains the same number of characters, including spaces. Another indicator of position-dependent program logs is that the “white space” is made up of spaces, not tabs or other characters. If your program log does not fit this description, you have a delimited program.

Figure 9-10 shows a typical position-dependent program. Each “field” is in a specific column, with each data type always starting at the same position on all lines/rows. Notice the cursor positioned just before the Category column and the “Col 23” shown in the lower right corner. This indicates that the starting position of the category starts at character 23. Counting the number of characters to the right, we find that the column can fit 8 characters. Another indicator that this is a position-dependent log is that the “white space” is made up of spaces, not tabs or other character.

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| | | | | | |
|---|----------|------|-------|---------|--------------------------------------|
| + | 00:51:30 | 5011 | 01:00 | AUDIO | Toma Ads/5011 |
| + | 00:52:30 | 5592 | 00:30 | AUDIO | Red Lobster/5592 |
| + | 00:53:00 | 2692 | 01:00 | AUDIO | Image Media Marketing Inc./2692 |
| + | 00:54:00 | 5451 | 00:30 | AUDIO | Cumulus - Mandan Progress Organ/5451 |
| + | 00:54:30 | 0716 | 00:15 | AUDIO | East 40/0716 |
| | 01:51:30 | | | COMMENT | BREAKSTART |
| + | 01:51:30 | 5517 | 00:30 | AUDIO | Heartland Mortgage Company/5517 |
| + | 01:52:00 | 2692 | 01:00 | AUDIO | Image Media Marketing Inc./2692 |
| + | 01:53:00 | 1344 | 00:30 | AUDIO | Cumulus - Job opportunity/1344 |
| + | 01:53:30 | 1352 | 00:30 | AUDIO | ND Broadcasters Associations/1352 |
| + | 01:54:00 | 5592 | 00:30 | AUDIO | Red Lobster/5592 |
| + | 01:54:30 | 0716 | 00:15 | AUDIO | East 40/0716 |
| | 02:51:30 | | | COMMENT | BREAKSTART |
| + | 02:51:30 | 5592 | 00:30 | AUDIO | Red Lobster/5592 |
| + | 02:52:00 | 5011 | 01:00 | AUDIO | Toma Ads/5011 |
| + | 02:53:00 | 5543 | 01:00 | AUDIO | Cumulus - Job opportunity/5543 |

Figure 9-10. Sample Position-Dependent Program Log

To configure the Import-Merge module for a position-dependent file, collect the following information by analyzing your file:

- The starting position of each data type's field (for example, Cue, Description, Length, Scheduled Time, Filename, and so on.).
- The maximum length of each field above.
- The format of each time field (mm:ss or hh:mm:ss).



Tip: To find the starting position of each column easily, enable Notepad's Status Bar (on the **View** menu, and enable the **Status Bar** option). The cursor's position appears as column numbers ("Col #") and line numbers ("Ln #") appear in the lower right corner of the Notepad window. Place your cursor at the start of a column to find the position, place your cursor at the end of the column, and then subtract that position from the previous one to get the column's length.

9.4.3.2 Delimited Format

Delimited program logs are quickly apparent in their difference of style from position-dependent logs. Each piece of data is separated by a specific character, with no spaces ("white space") between the data and the separating character. This means that each row will have a differing overall length from other rows in your program log.

Figure 9-11 shows a typical delimited program log file. Every line and row is a single event, and each line contains the same number of "fields", separated by the "|" delimiting character. This example has Cue as field 1, Scheduled Time as field 2, File Name as field 3, Length as field 4, Category as field 5, and Description as field 6.

Import-Merge Module

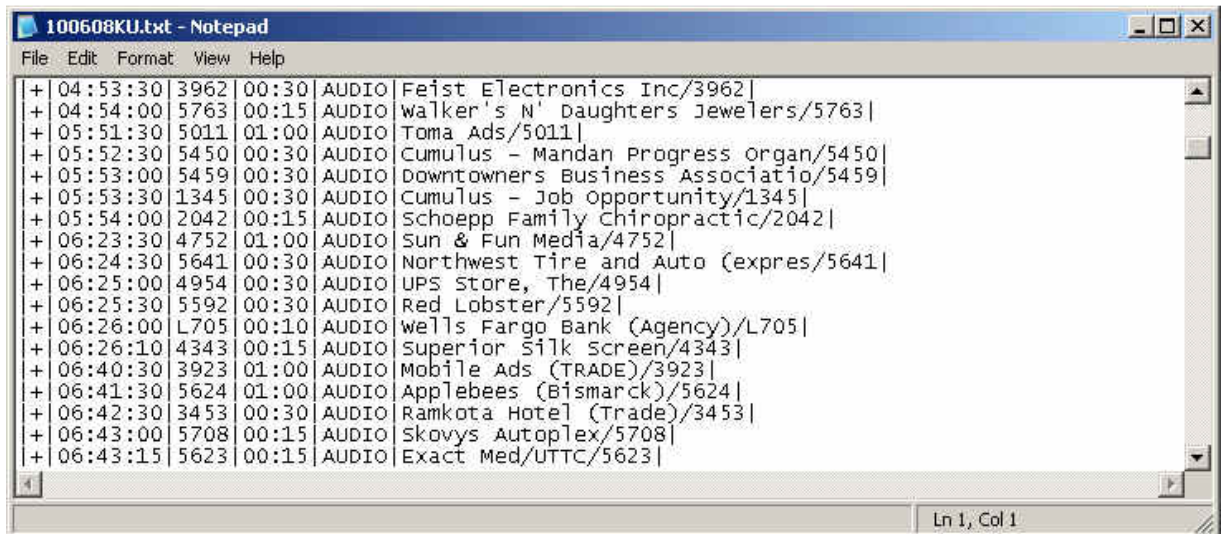


Figure 9-11. Sample Delimited Program

As Figure 9-11 shows, the most common delimiting character is the “|” pipe symbol (this is usually the upper-case character of the “|” key on your keyboard). If your file does not use the pipe symbol as its delimiting character, you should be able to recognize it by looking at the program log, since the delimiting character will be between each piece of data.

To configure the Import-Merge module for a delimited file, collect the following information by analyzing your file:

- The delimiting character.
- The order of the fields in each row is (for example, Cue, Description, Length, Scheduled Time, Filename, and so on). The left-most field is field 1, the next field is 2, and so on.
- The format of each time field (mm:ss or hh:mm:ss).

9.4.4 Block Marker Configuration Settings

1. Click the **Next** button or click **Block Marker** in the left pane.

The settings in Figure 9-12 appear.

Import-Merge Module

The screenshot shows the 'Settings' dialog box with the 'Import Formats' tab selected. The 'Station' dropdown is set to 'WBSI - The Best Of BSI'. The 'Music' tab is active, and the 'Block Marker' section is highlighted in the left sidebar. A blue instruction box states: 'Input the stop-set position marker for music logs or start of stop-set block for traffic logs. Input ignore and change to comment settings. Click Next when complete.' The 'Block Marker' section contains a text input field, an 'In Field' dropdown set to 'Cue', and an unchecked 'Enable Time Sync Parameters' checkbox. Below this are three rows for 'Change To Comment', 'Ignore', and 'Voicetrack Marker', each with an 'In Field' dropdown and a '+' button. At the bottom are 'Back' and 'Next' buttons. The footer includes a 'Restore From Server' button, 'OK', and 'Cancel' buttons.

Settings

General Import Formats

Station
WBSI - The Best Of BSI

Music Traffic Test

Input Folder & File
Log Type
Filter Setup
Block Marker
Replace Text

Input the stop-set position marker for music logs or start of stop-set block for traffic logs. Input ignore and change to comment settings. Click Next when complete.

Block Marker

In Field Cue

☐ Enable Time Sync Parameters

Change To Comment In Field +

Ignore In Field +

Voicetrack Marker In Field +

Back Next

Restore From Server OK Cancel

Figure 9-12. Block Maker Settings

2. Complete the fields in the **Import Formats** tab (see Table 9-5).
3. Proceed to section 9.4.5.

Import-Merge Module

Table 9-5. Block Marker Fields in the Import Formats Tab

| Field | Description | Default |
|-----------------------------|--|---------|
| Block Marker | Enter your Block Marker's text. | — |
| In Field | Select the field that contains that text you entered in the Block marker field. | Cue |
| Enable Time Sync Parameters | Enables the automatic insertion of a time-next event prior to the commercial break created by the text specified by the Block Marker field. For example, if the music log contained STOPSET 15:30:00, a time-next event is inserted automatically before the commercial break with a scheduled time of 15:30:00. You can specify an optional parameter of the number of elements preceding the commercial break. For example, STOPSET 15:30:00, 5 inserts the time-next event five elements prior to the commercial break. | — |
| Change To Comment | To convert imported events into comments, click the Add button to the right of the Change to Comment field. Complete the following fields in the Change to Comment pop-up window: <ul style="list-style-type: none">• Text = enter the distinguishing text, such as a category of "TEXT" or "NOTE".• Field is Empty = if the field is empty, check this check box.• In field = select the field where OpX One will find that text. Buttons are also provided for editing and deleting entries. | — |
| Ignore | If your log-generating software includes events that you do not want OpX One to import, click the Add button to the right of the Ignore field to convert imported events into comments. Complete the following fields in the Ignore pop-up window: <ul style="list-style-type: none">• Text = enter the distinguishing text to be ignored.• Field is Empty = if the field is empty, check this check box.• In field = select the field where OpX One will find that text. Buttons are also provided for editing and deleting entries. | — |
| Voicetrack Marker | From your log-generating software (most commonly from your music log), you can add voicetrack markers to your program log using comments. This simplifies voicetracking with OpX One's Studio Client by allowing your talent to click the NEXT button to automatically move the Voicetrack Editor to the position in the Program Log for which they need to record the next voicetrack. To define your voicetrack marker, click the Add button to the right of the Voicetrack Marker field. Complete the following fields in the Voicetrack marker pop-up window: <ul style="list-style-type: none">• Text = enter the distinguishing text.• Field is Empty = if the field is empty, check this check box.• In field = select the field where OpX One will find that text. Buttons are also provided for editing and deleting markers. | — |

9.4.5 Replacing Text Configuration Settings

If you need to auto-replace text entries in your import logs, use the Replace Text settings to configure these entries.

1. Click the **Next** button or click **Replace Text** in the left pane.

The settings in Figure 9-13 appear.

Import-Merge Module

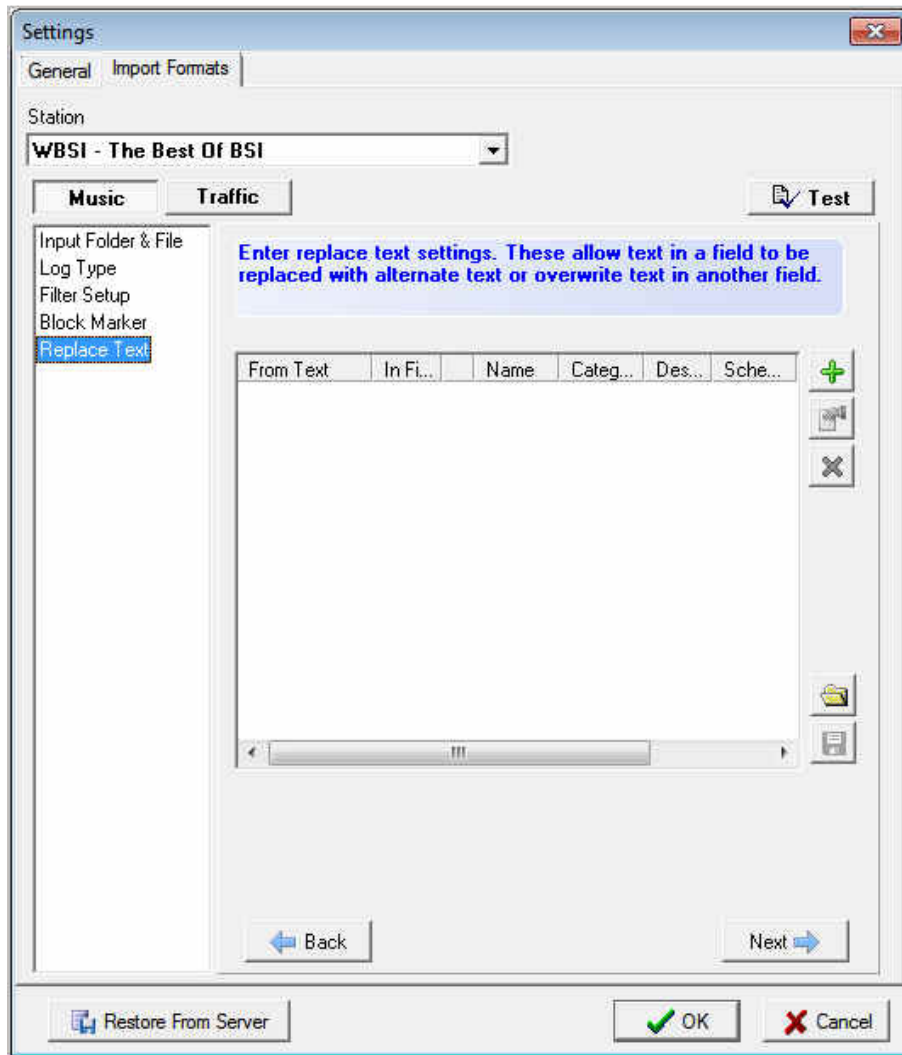


Figure 9-13. Replace Text Settings

2. Click the **Add** button.
The Replace Text dialog box appears (see Figure 9-14).
3. Complete the fields in the dialog box (see Table 9-6).
4. Click **OK**.
5. If you need to edit or delete entries, use the appropriate buttons to the right of the field.
Below these are buttons for replacing and exporting txt strings and importing replace text strings.

Import-Merge Module

Figure 9-14. Replace Text Dialog Box

Table 9-6. Fields in the Replace Text Dialog Box

| Field | Description | Default |
|-------------------------|---|----------|
| From Text | Enter the text to be read. | — |
| In Field | Field from which the text is read. | — |
| Cue | Cue type to be inserted | — |
| Status | Status of the event to be inserted. | — |
| Scheduled | Date and time for which the item is scheduled. If unchecked, keeps the scheduled time in place. | 00:00:00 |
| Name | Name of the item. | — |
| Length | Duration of the item. | 00:00 |
| Category | Category to which the item belongs. | — |
| Description/Macro Event | Description of the audio item or the parameters of the macro. | — |

9.5 Importing Program Logs

Most music-oriented stations import a music log containing all the music selections to play throughout the day, and a secondary traffic log that must be combined with the music log to insert all the advertisements to be played. These users start the import process described in section 9.5.1 followed by the procedure in section 9.5.2 on page 271.

For talk stations that do not play music, or for stations that have only a traffic log to import, skip section 9.5.1 and proceed to section 9.5.2 on page 271. Conversely, to import a music log only and not a traffic log, perform the procedure in section 9.5.1.

9.5.1 Importing Your Music Log

➤ To import your music log

1. Click the **Import Using Music Import** button or click **File > Using Music Format**.



The Import Music Log dialog box appears.

2. Select the month, day, and year from the calendar, and then click **OK**.
*By default, the import function imports from your locally configured import path. To import from your File Server's import path for your station, choose the **Server** option.*
3. To import a log that does not conform to your configured File Name Template, click the **Browse For File** button on the right side of the **Local** field and select an import file.
4. Click **OK**.

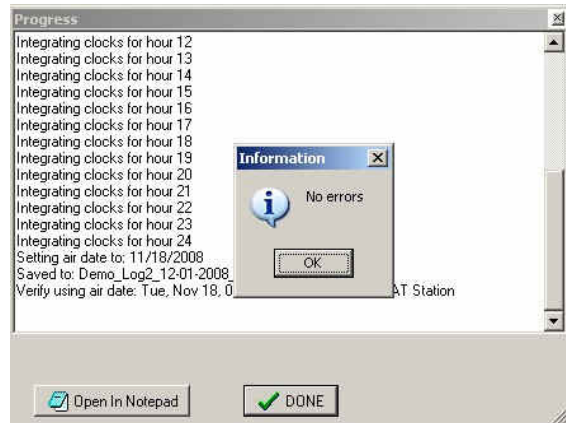
The events in your music log are



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imported. A progress window shows the progress of the import, along with any errors or warnings. After the logs are imported, an Information pop-up window alerts you to the number of errors generated during the import process.

5. Click **OK** to remove the message.
6. Click **Done**.



9.5.2 Importing Your Traffic Log

➤ To import your music log

1. Click the **Merge Using Traffic Format** button or click **File > Using Traffic Format**.



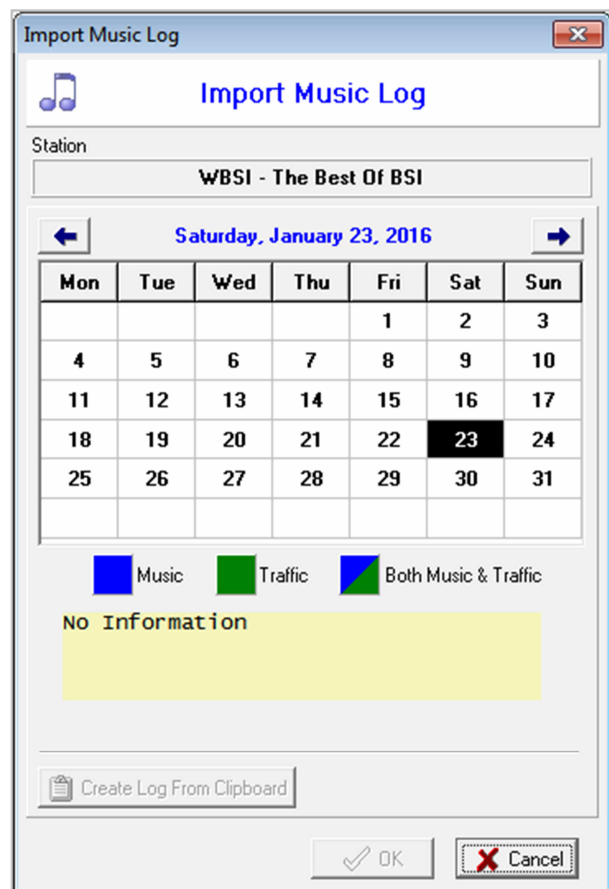
The Import Music Log dialog box appears.

2. Select the month, day, and year from the calendar, and then click **OK**.

By default, the import function imports from your locally configured import path. To import from your File Server's import path for your station, choose the **Server** option.

3. To import a log that does not conform to your configured File Name Template, click the **Browse For File** button on the right side of the **Local** field and select an import file.
4. Click **OK** to remove the message.
5. Click **Done**.

If you imported a music log before importing the traffic log, the events from your traffic log and clocks are



combined automatically with your music log events in the correct order. You can now edit your log, add new events, or remove events from your final log before saving it.

6. To save your finished program log to the File Server, click the **Save To OpX One Server** button.

9.6 Exporting/Saving a Finished Program Log

The following sections describe how to save program logs to the file server and export program logs for use in third-party applications.

9.6.1 Saving Your Program Log to the File Server

- To save the current program log to the File Server

1. Click the **Save To OpX One Server** button on the tool bar.

A progress window shows the progress of the save operation.

2. Click **Done** to remove the window.



9.6.2 Exporting Your Program Log for Third-Party Applications

- To export your current program log for use by a third party

1. On the **File** menu, click **Export**.
The available import commands appear.
2. Click the appropriate option (see
- 3.
- 4.
5. Table 9-7).

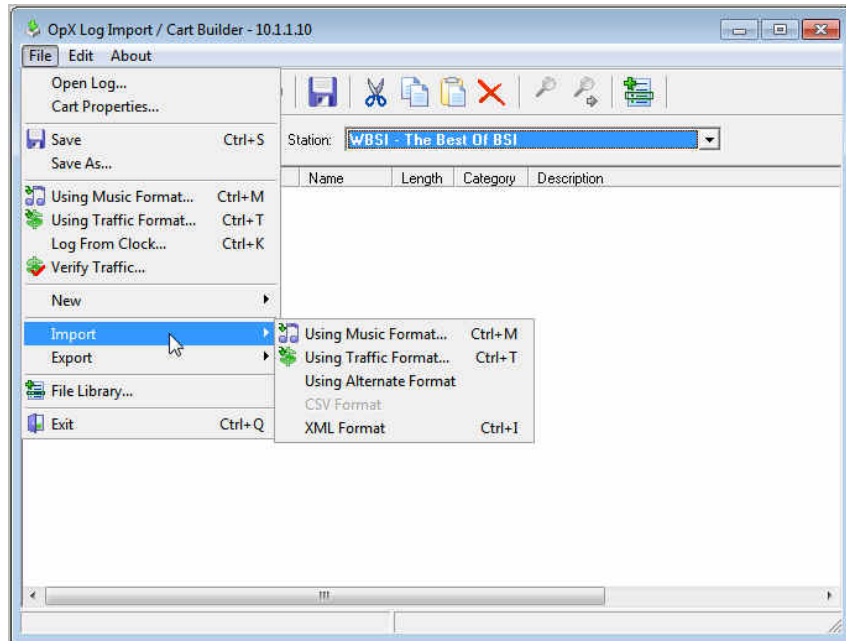


Table 9-7. Import Options

| Option | Description |
|------------------------|--|
| Using Music Format | Exports your program log using the settings configured in the preferences for importing in music format. |
| Using Traffic Format | Exports your program log using the settings configured in the preferences for importing in traffic format. |
| Using Alternate Format | Exports your program log using the settings configured in the preferences for importing in alternate format. |
| CSV Format | Exports your program log in comma-separated-value (CSV) format. |
| XML Format | Exports your program log as an .xml file. xml is the format OpX One uses natively. |

9.7 Manually Adding and Editing Program Log Events

9.7.1 Adding Audio Files Using the File Library

You can add audio files to your program log using the file library to browse through the audio files on your File Server and then dragging-and-dropping them to your program log. This method allows you to add audio files. You cannot use this method to add other commands to your program log. To add macros, or any other event type, to your program log, see Appendix A - Macros.

➤ **To add audio files using the file library**

1. Click the **File Library** icon on the tool bar or click **File > File Library**.

A File Library similar to the following appears, with all audio files from all folders displayed.

2. Use the following steps to enhance File Library viewing:

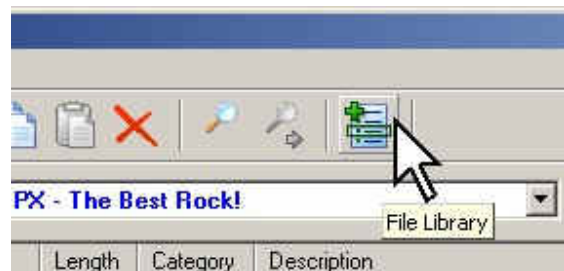
- To limit the file list to show only a single folder, click the drop-down list and click the desired folder.
- To search through the file list by keyword, type text in the **Find** field. The label to the right of the **Find** field indicates what column will be searched. The column that will be searched is the same column by which the File List is sorted. As **Error!**

Reference source not found. shows, the sort

indicator is in the **Name** column, so OpX One searches the Name column for the text you type in the **Find** field.

- To refresh the list to show new items added to your file server while the File Library window has been open, click the **Refresh**  button.

3. Click and drag your desired item from the File Library's File List and drop it into your program log.



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- If you drop the event below another in the program log, the new event is added as the last item in the log.
- If you drop your event on top of an existing event, the new event is added after that event and all subsequent events shift down to make room.

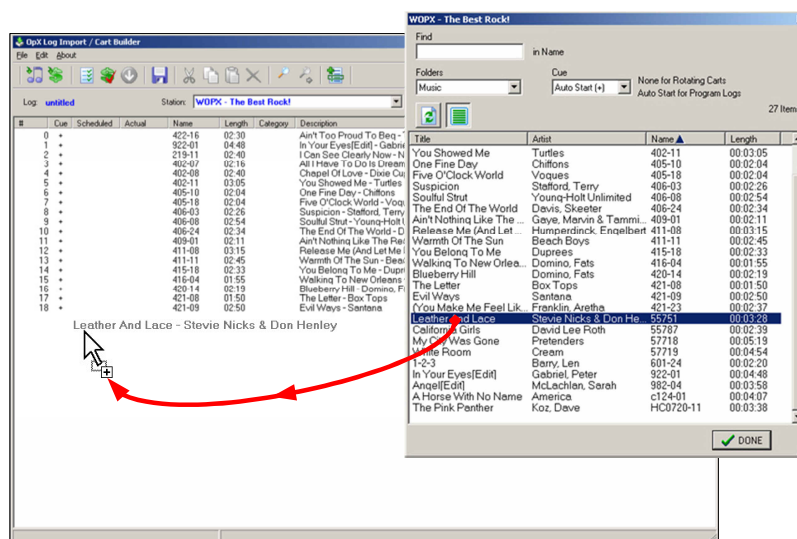


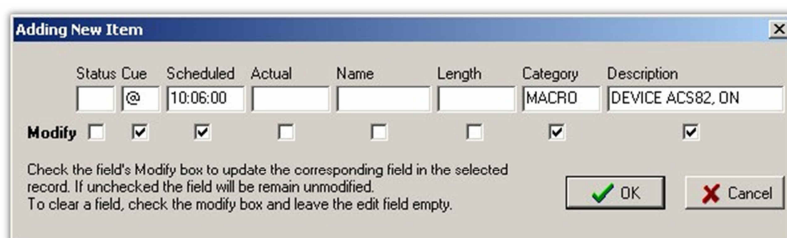
Figure 9-15. Dragging and Dropping from the File Library File List to the Program Log

9.7.2 Adding New Events Manually

➤ To add new events manually

1. In the program log, click the event above which you want to insert the new event.
2. On the **Edit** menu, click **Insert New Item**.

An Adding New Item dialog box similar to the following appears.



3. Click in each field and enter the data pertinent to your event.
4. Click **OK**.

9.7.3 Editing Events in Your Program Log

➤ **To edit events in your program log**

1. In the program log, click the event you want to modify.
2. On the **Edit** menu, click **Edit Fields**.

An Edit Item dialog box similar to the following appears.

| Status Cue | Scheduled | Actual | Name | Length | Category | Description |
|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| + | 10:06:00 | | | | MACRO | DEVICE ACS82, OFF |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Check the field's Modify box to update the corresponding field in the selected record. If unchecked the field will remain unmodified.
To clear a field, check the modify box and leave the edit field empty.

OK Cancel

Figure 9-16. Edit Item Dialog Box

3. Click in each field you want to change and edit the value.
*When you enter a value, the corresponding **Modify** box gets checked automatically.*
4. To clear a field, check the **Modify** check box and leave the corresponding entry blank.
5. Click **OK**.

9.7.4 Changing the Cue Type of Events In Your Program Log

The editing method described in section 9.7.3 allows you to edit all fields of an event in your program log. Sometimes, however, you need only change the cue type of an event.

➤ **To change the cue type**

1. Click the event in the program log.
2. Press the key on your keyboard for the new cue type you desire:
 - To set your event's cue type to Auto Start, press the + key.
 - To set your event's cue type to Time Immediate, press the @ key (Shift+2).
 - To set your event's cue type to Time Next, press the # key (Shift+3).
 - To toggle the event to Manual, press the same key as the existing cue type.

9.8 Working with Carts

9.8.1 Creating a Cart

You create a cart using the same procedure you use to create a program log. A cart is like a mini-program log. Carts allow you to create a singular item that contains links to multiple audio files and/or macros. When creating a program log or Hot Key, you can insert a single cart that you created instead of inserting multiple items to do the same thing. When creating a trigger set, scheduled event, or program log, using carts instead of single event, allows you to execute multiple items in succession.

The way carts behave depends how you set the cue types of the events in the cart. See Table 9-8.

Table 9-8. Cart Behaviors

| Cue Type | Cart Behavior |
|---|---|
| All events in the cart have Manual Start (blank) cues | When you first play the cart, only the first event is played, and then the cart stops. The next time the cart is played, only the next event in the cart is played. The third time the cart is played, only the third item is played. This sequence continues until the cart is played enough times that all items in the cart have been played. At this point, the next time the cart is played, it starts from the top again. This type of cart is referred to as a "rotator." |
| All the events in the cart have Auto Start (+) cues. | When you play the cart, all events in the cart play in succession, from the first event in the cart through to the last event in the cart. |
| Some events have Auto Start cues and some have Manual Start cues. | The cart plays in order from top to bottom, continuing to play events from the cart until the cart encounters a Manual Start event, at which point the cart stops. The next time you play the cart, it starts from where it left off (the Manual Start item it stopped on last time) and plays the rest of the events until it encounters another Manual Start event. This sequence continues until the cart is played enough times that all items in it have been played. At this point, the next time the cart plays, it starts at the top again. |

➤ To create your cart

1. On the **File** menu, click **New**, and then click **New Cart**.
2. Add events to your cart using the File Library (see section 9.7.1) or by using **Edit > Insert New Item** (see section 9.7.2).



Note: All events in a cart must have either an Auto Start (+) or Manual Start (blank) cue type. No other cue types are valid.

3. After you add the items to the cart, save the cart (see section 9.8.3).

9.8.2 Editing a Cart

➤ To edit a cart

1. Create a new cart.
2. Using the File Library, find the cart you want to edit and drag it into the new cart.
The events are placed into the new cart and the file name is updated with the name of the existing cart.
3. Edit, add, or delete events from the cart.
4. Click the **Save To File Server** button to overwrite the previous file of the same name or click **File > Save As** to save the file under a different name, and then click **OK**.

9.8.3 Saving a Cart

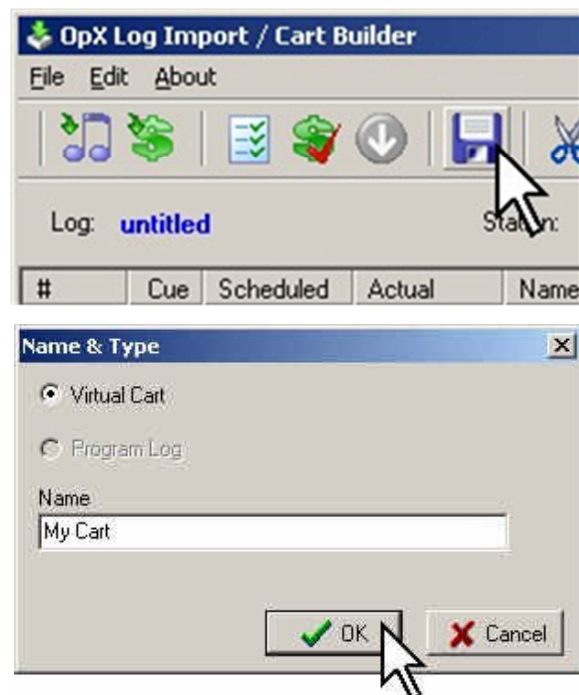
➤ To save the current cart

1. Click the **Save To File Server** button on the tool bar.

You are prompted with the Name & Type dialog box.

2. In the **Name** field, enter a file name for your cart.
3. Click the **OK** button.

Your cart is saved to the File Server, making it available to your station's Audio Server.



10 Info Editor Module

Topics:

- ^ *Starting the Info Editor Module (page 280)*
- ^ *Quick Tour (page 281)*
- ^ *Setting Intro and Segue Times (page 289)*

This chapter describes the OpX One Info Editor module.

The Info Editor module allows you to edit all available tags; set intro, segue, and hook times; and transfer audio files to the File Server.

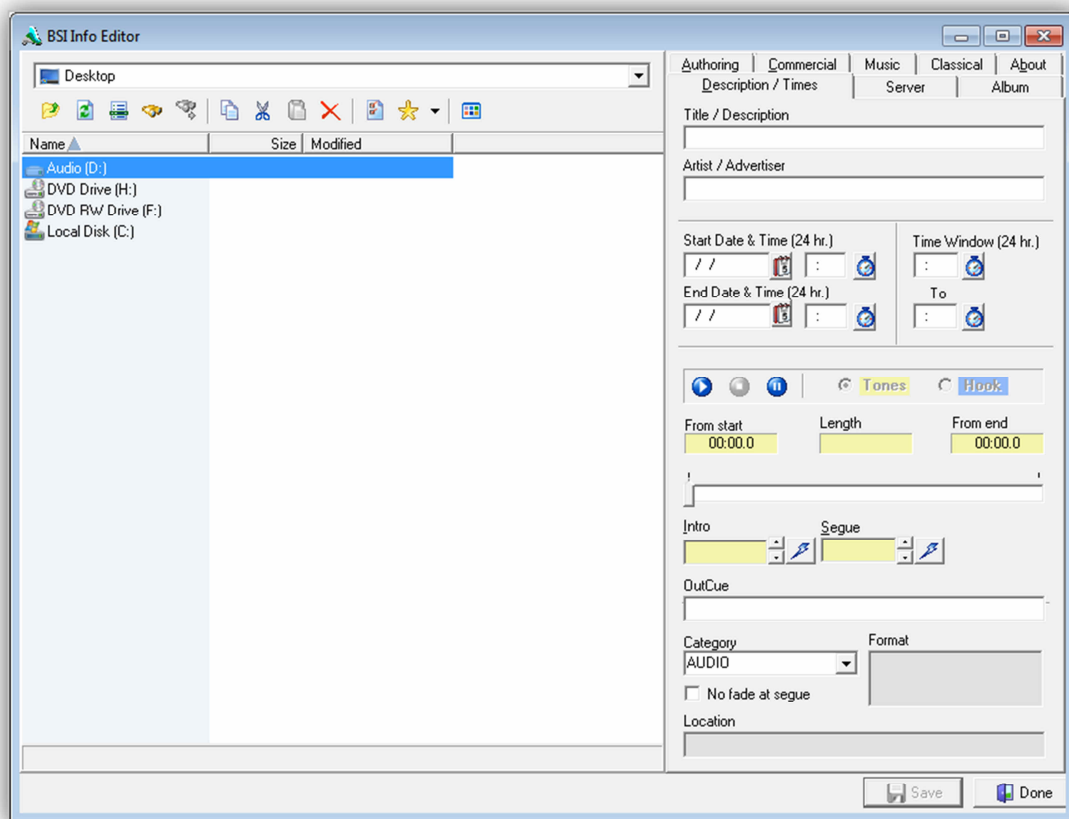
10.1 Starting the Info Editor Module

You must start the File Server module before you start the Info Editor module.

➤ **To start the Info Editor module**

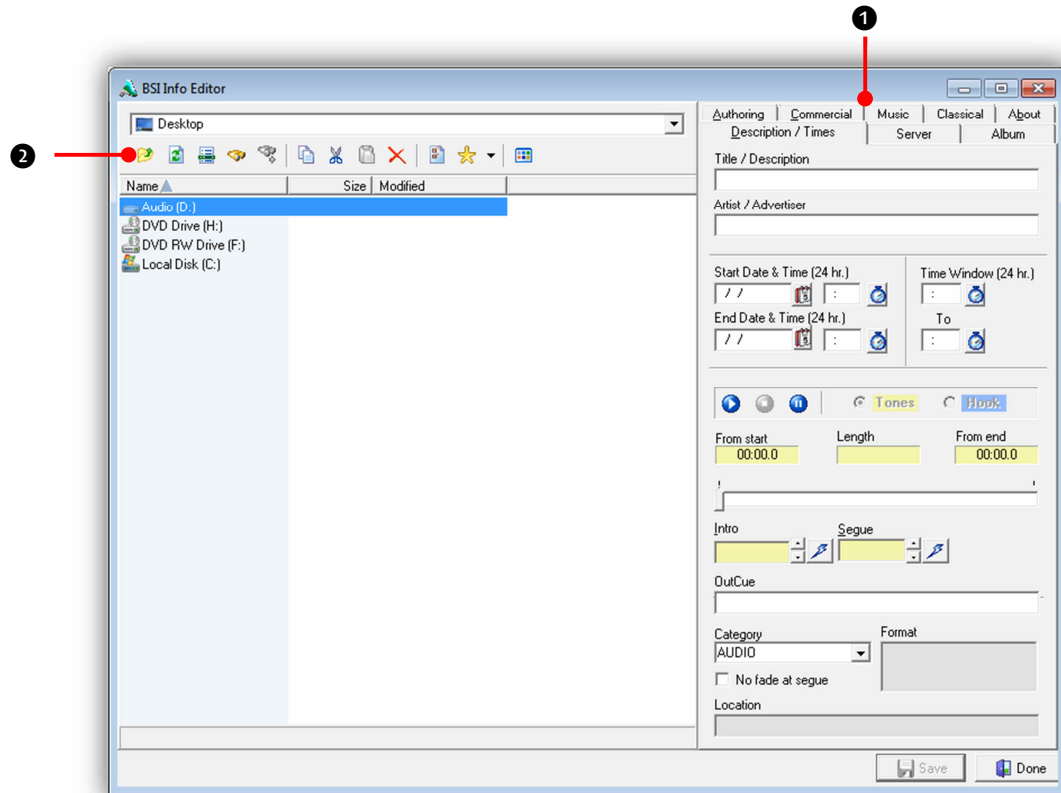
1. Start the File Server module (see section 3.1).
2. Click the Windows Start button and click **Programs > Broadcast Software > InfoEdit**.

A BS Info Editor window similar to the following appears.



10.2 Quick Tour

The following sections provide a quick tour of the Info Editor module interface.



| Number | Description |
|--------|-------------------------------------|
| 1 | File list. See section 10.2.1. |
| 2 | Tabbed section. See section 10.2.3. |

The Info Editor's file list allows you to browse to any folder available on your workstation. It displays folders and audio files to simplify navigation through your audio files.

10.2.2 Editing Multiple Files

The Info Editor can edit the tags of multiple files at the same time.

➤ **To edit multiple files**

1. Click the **Select Columns** button.

The column for the tag you want to modify appears.

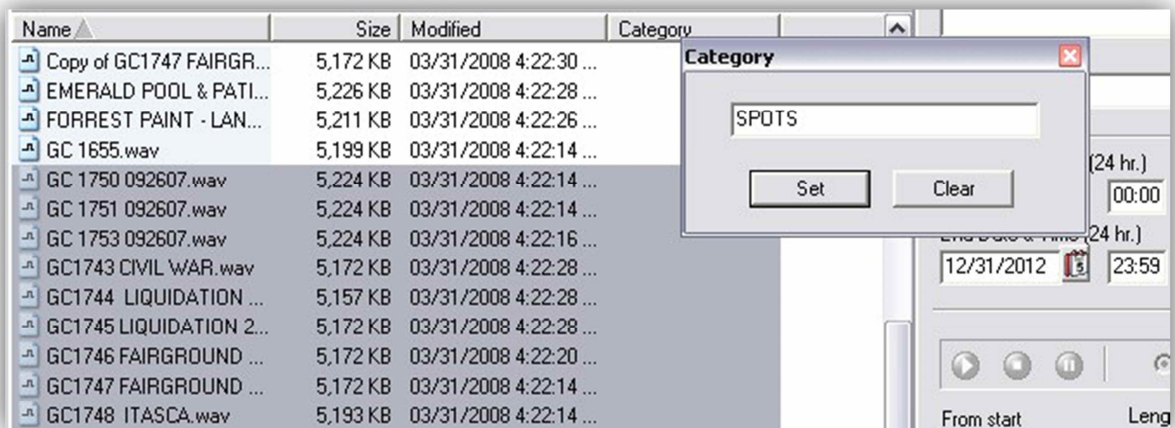
2. Click the first file you want to edit.

3. To edit additional files, perform the appropriate step:

- If the files are contiguous to the one you clicked in step 2, hold down the Shift key and click the last file. All files between the first and last ones you clicked are selected automatically.
- If the files are not contiguous, hold down the Ctrl key and click each additional file.
- If you change your mind about a selected file, hold down the Ctrl key and click the file to deselect it.

4. With all your files selected, right-click the column title.

A Category pop-up window appears.



5. Enter the data you want to apply to all the selected files, and then click the **Set** button.

OR

To "blank-out" the entries for the highlighted files, click the **Clear** button.

OR

To cancel the procedure, click on the pop-up window's Close button in the top-right corner.

10.2.3 Tabbed Section

The Info Editor's tabbed section has seven tabs to allow you to enter various data into your audio files.

➤ **To edit an audio file's tags**

1. Using the **File List** on the left side of the Info Editor, browse to the file whose tags you want to edit, and then click it.
2. Edit the file's tags in the Info Editor's tabs on the left side of Info Editor.

The following sections describe the Info Editor tabs.

10.2.3.1 Fields in the Description/Times Tab

| Option | Description |
|-------------------------|--|
| Title/Description | Enter the name of your audio file. |
| Artist/Advertiser | Enter the name for the creator of the file. |
| Start Date & Time | Sets the date range and time your file is to be played. |
| Time Window | When entered, the audio file will only be playable between the hours selected. |
| Play/Stop/Pause buttons | Allows you to preview your file inside the Info Editor. |
| Tones/Hook | When you set tones, you can set both regular Intro and Secondary Tones. You can also set Hook Tones for use with Simian's Hook Cart functionality. |
| From start | Allows you to see how far the slider is from the beginning of the file during playback. |
| Length | Shows the length of the file. |
| From end | Allows you to see how far the slider is from the end of the file during playback. |

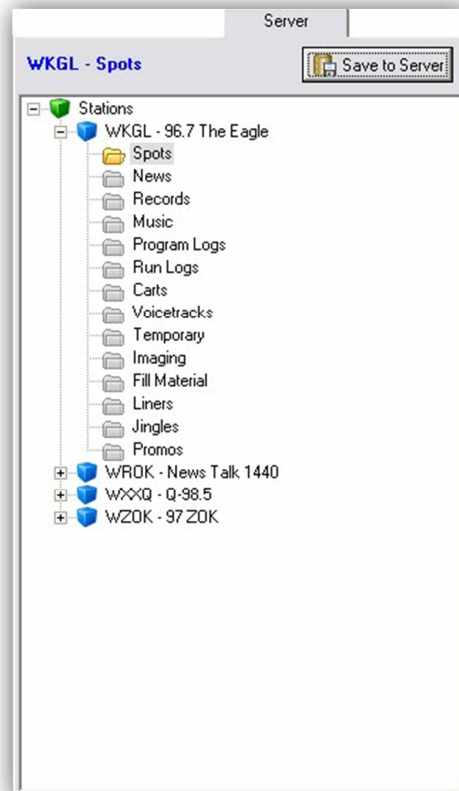
| | |
|--------------|---|
| Slider | Allows you to scrub through the song during playback. You can see the Tones or Hook within the slider: Look for white space at both ends of the blue bar under the slider. The white at the beginning is your intro and the white at the end is your segue. |
| Intro button | Visible when Tones is selected. This button allows you to set the intro tone for the audio file, while the time window allows you to see exactly where the tone is set. |
| Segue button | Visible when Tones is selected. This button allows you to set the Secondary Tone for the audio file, while the time window allows you to see exactly where the Secondary Tone is set. |

Info Editor Module

| Option | Description |
|------------------|---|
| Outcue | Text that appears in the decks as the song is going out. |
| Hook Start | Visible when Hook is selected. Allows you to set the start for the "hook" for the audio file. |
| Hook End | Visible when Tones is selected. Allows you to set the end for the audio file's "hook." |
| Category | You can assign a category to a file so that it will always display the correct category in the audio list and event builder |
| Format | Shows the file attributes of your file. |
| No fade at segue | Assures that the file will never fade out at the end no matter what settings are configured in Simian. Great for spots. |
| Location | Shows you where the file is stored on your hard drive. |

10.2.3.2 Fields in the Server Tab

| Option | Description |
|-----------------------|--|
| Folder List | Browse to a stations' audio folder. |
| Save To Server button | Click this button to transfer the currently loaded audio file to the selected folder on the file server. |



10.2.3.3 Fields in the Album Tab

| Option | Description |
|--------|---|
| Album | Enter the album name. |
| Year | Holds the year information for the file. |
| Genre | Holds the genre information for the file. |
| Track# | Holds the track information for the file. |

Album

Disintegration

Year

1989

Genre

Alternative

Track #

6

10.2.3.4 Fields in the Authoring Tab

| Option | Description |
|--------------------------|---|
| Producer | Holds the producer information for the file. |
| Talent | Holds the talent information for the file. |
| Composer | Holds the composer information for the file. |
| Publisher | Holds the publisher information for the file. |
| Copyright/Record Company | Holds the copyright information for the file. |
| Comments | Holds any comment information that you want to include in the file. |

Authoring

Producer

Dave Allen

Talent

Robert Smith
Simon Gallup
Paul Thompson
Boris Williams

Composer

Robert Smith

Publisher

WEA

Copyright / Record Company

Elektra

Comments

10.2.3.5 Fields in the Commercial Tab

| Option | Description |
|--------------------------------|--|
| Agency | Holds the agency information for the file. |
| Account Executive/Sales Person | Holds account executive and sales person information. |
| Copy | Holds information you want to add to the file. This tag can be displayed in a text box within Simian any time the file is played. Select Tools/Program Options/General and check in Display Copy Field option. |
| URL | You can associate a URL with each file and then send that URL to the Dynamic HTML Page, or the MS Encoder. |

Commercial

Agency
The BSI Agency!

Account Executive / Sales Person
John Doe

Copy

URL
http://www.bsiusa.com

10.2.3.6 Fields in the Music Tab

| Option | Description |
|------------------|---|
| Key | Holds the key in which the cut was performed. |
| End | Holds information about how the cut ends. |
| Energy | Common descriptor for audio cuts. |
| Texture | Helps you sort your cuts by audience. |
| Tempo | Holds the tempo in which the cut was performed. |
| Beats Per Minute | Holds the BPM information for the file. |

Music

Key
C

End
Fade

Energy
Mellow

Texture
Core

Tempo
Medium Slow

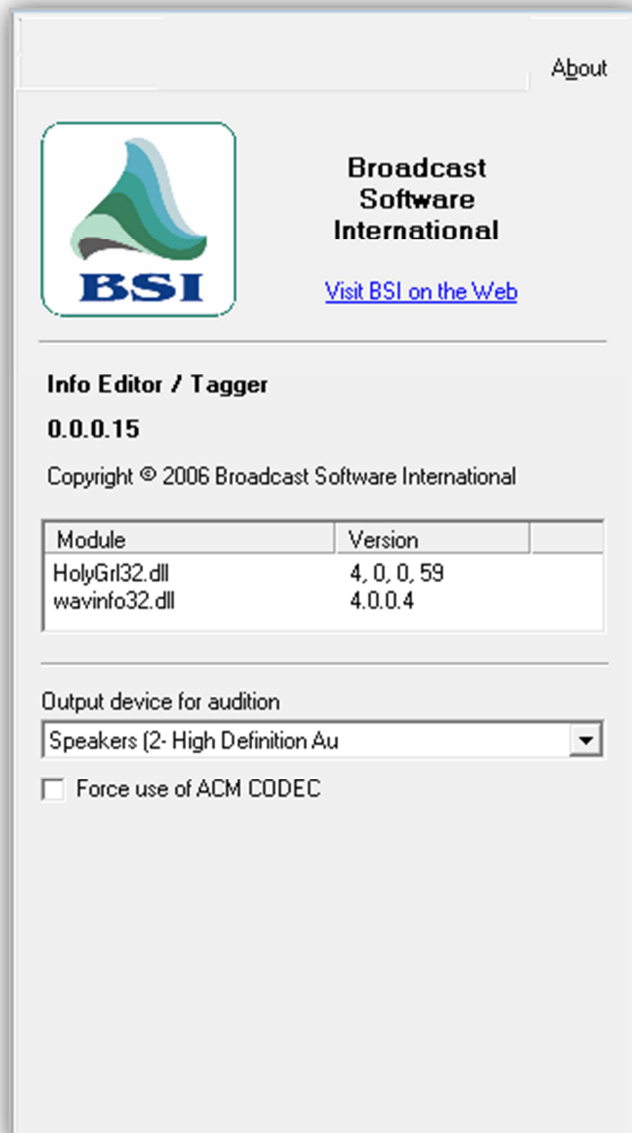
Beats per minute
90

10.2.3.7 About Tab

The **About** tab shows the Info Editor version, a link to the BSI website, and information about the versions of supporting dynamic link library (DLL) files.

The **Output device for audition** drop-down list allows you to select the audio device you want to use for playback while you're tagging files.

To force your computer to use the Windows' CODEC instead of on-soundcard CODECs that you may have, check **Force use of ACM CODEC**.



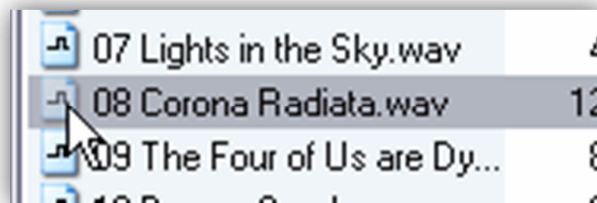
10.3 Setting Intro and Segue Times

Setting intro and segue points in your music files is critical to smooth-sounding transitions between songs on a music station. The Info Editor makes it easy to set intro and segue points.

➤ **To set intro and segue times**

1. In the file list on the left side of the Info Editor, browse to and click the audio file to which you want to add intro and segue points.

The file loads into the tabbed section.

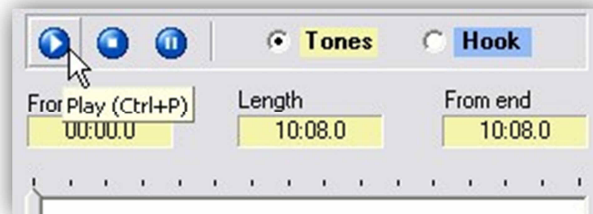



2. Go to the **Description/Times** tab on the tabbed section of the Info Editor.

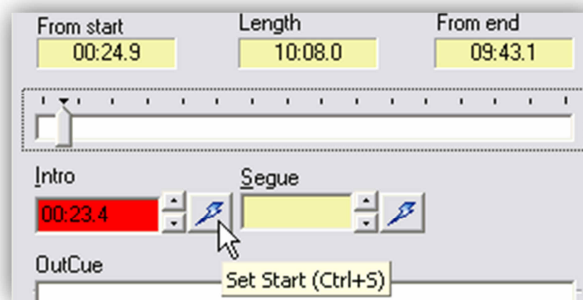


Info Editor Module

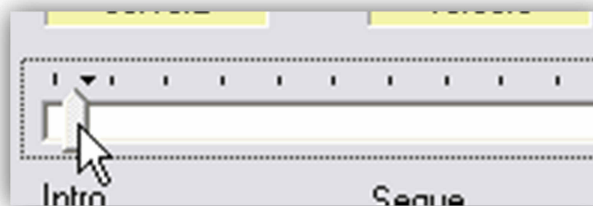
3. To set the intro point of your song, click the **Play** button to start playback of your audio file.



4. As your audio file plays back, listen to the track. When the track gets to the point where you want to set your intro point, click the **Set Start**  button.



5. If you want to re-set the intro point, move the pointer on the scrubber back in the file.

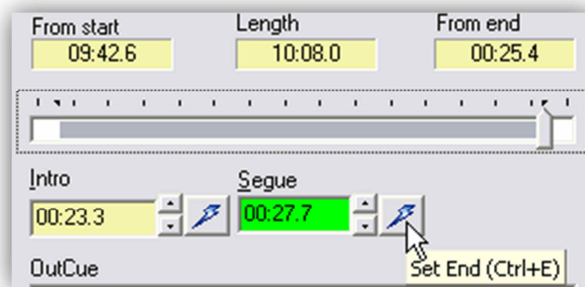


Info Editor Module

- To fine-tune your intro point, click the **Fine Adjust** buttons to increase or decrease the intro point in tenths of a second.



- You add the segue point using the same procedure that is used to add the intro point. The only difference is that you click the **Set End** button to set the segue point.



- Re-settings or adjusting the segue point uses the same technique shown in step 3.

11 FTP Server Module

Topics:

- ^ *Starting the FTP Server Module (page 293)*
- ^ *Quick Tour (page 294)*
- ^ *Configuring the FTP Server Module (page 299)*
- ^ *Starting and Stopping the FTP Server (page 299)*

The FTP Server is automatically launched by the File Server when it starts up. Under normal circumstances, users will not need to interact with the OpX One FTP Server.

This chapter describes the OpX One FTP Server module.

The FTP Server module is responsible for transferring files to the audio servers.

1. Start the File Server module (see section 3.1), which will automatically launch the OpX FTP Server.
2. Look for the OpX FTP Server icon in the “System Tray” by the Windows System Clock (as shown at right). Hold down the CTRL key on your key while double-clicking on the OpX FTP Server icon.



OpX FTP Server

File Edit About!

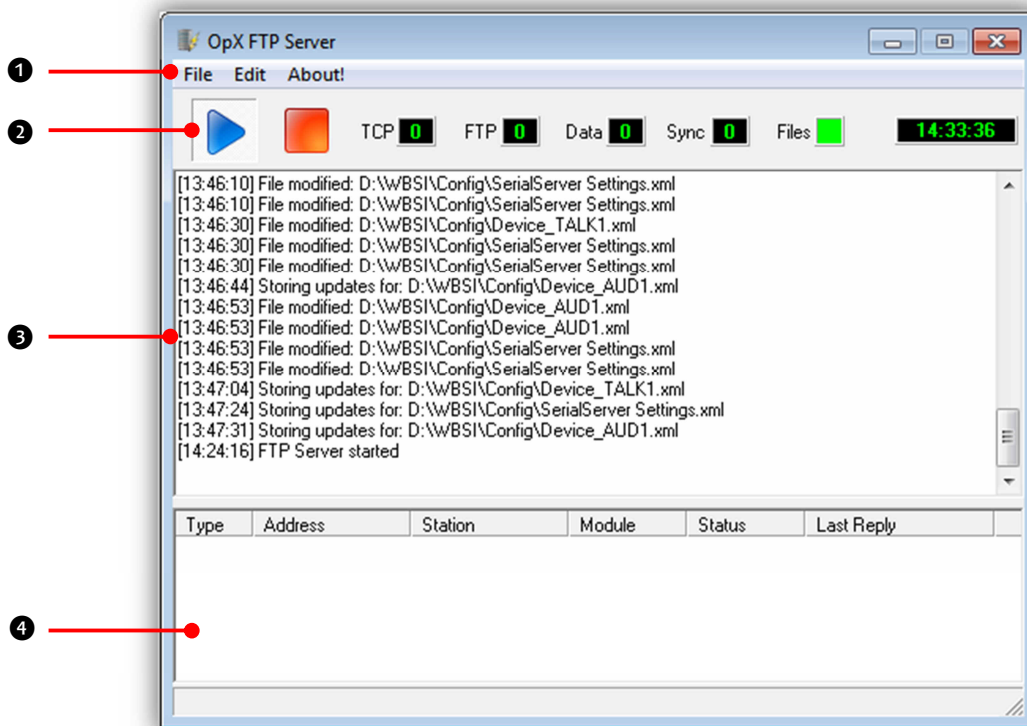
TCP 0 FTP 0 Data 0 Sync 0 Files 14:33:36

[13:48:10] File modified: D:\WBSI\Config\SerialServer Settings.xml
 [13:48:10] File modified: D:\WBSI\Config\SerialServer Settings.xml
 [13:48:30] File modified: D:\WBSI\Config\Device_TALK1.xml
 [13:48:30] File modified: D:\WBSI\Config\SerialServer Settings.xml
 [13:48:44] Storing updates for: D:\WBSI\Config\Device_AUD1.xml
 [13:48:53] File modified: D:\WBSI\Config\Device_AUD1.xml
 [13:48:53] File modified: D:\WBSI\Config\Device_AUD1.xml
 [13:48:53] File modified: D:\WBSI\Config\SerialServer Settings.xml
 [13:48:53] File modified: D:\WBSI\Config\SerialServer Settings.xml
 [13:47:04] Storing updates for: D:\WBSI\Config\Device_TALK1.xml
 [13:47:24] Storing updates for: D:\WBSI\Config\SerialServer Settings.xml
 [13:47:31] Storing updates for: D:\WBSI\Config\Device_AUD1.xml
 [14:24:16] FTP Server started

| Type | Address | Station | Module | Status | Last Reply |
|------|---------|---------|--------|--------|------------|
| | | | | | |

11.2 Quick Tour

The following sections provide a quick tour of the FTP Server module interface.

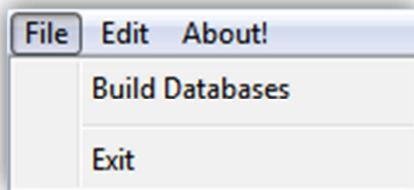


| Number | Description |
|--------|---|
| ① | Menu bar. See section 11.2.1. |
| ② | Tool bar. See section 11.2.2. |
| ③ | FTP server status. See section 11.2.3. |
| ④ | FTP server status list. See section 11.2.4. |

11.2.1 Menu Bar

The menu bar appears at the top of the FTP Server window. The following sections describe the menu options.

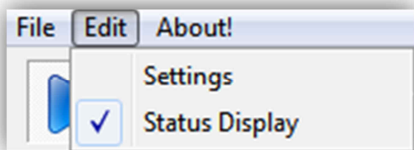
11.2.1.1 File Menu



Build Databases = rebuilds the FTP Server database.

Exit = exits the FTP Server module.

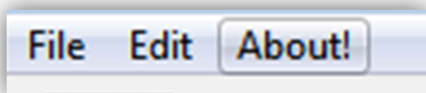
11.2.1.2 Edit Menu



Settings = configures FTP Server module settings. See section 11.3.

Status Display = shows (checked) or hides (unchecked) the status display.

11.2.1.3 About Menu



Opens a window that shows the version and build date of the FTP Server module you are running. This window also shows the amount of memory, virtual memory being used, and the amount of time that the FTP Server has been running. See Figure 11-1 for an example. To close the window, click **OK**.

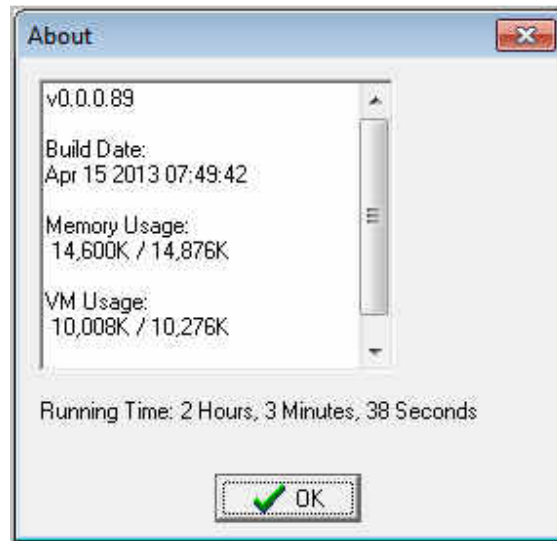


Figure 11-1. Example of About Information




11.2.2 Tool Bar

The FTP Server module tool bar appears below the menu bar.



Table 11-1 describes the tools on the tool bar.

Table 11-1. FTP Server Module Tool Bar

| Tool | Tool Name | Description |
|---|------------------|--|
|  | Start FTP Server | Starts the OpX One FTP server. See section 11.4. |
|  | Stop FTP Server | Stops the OpX One FTP server. See section 11.4. |
|  | TCP | Shows the number of files transferred via TCP. |
|  | FTP | Shows the number of files transferred via FTP. |
|  | Data | Shows the number of pending database updates. |
|  | Sync | Shows the number of files remaining to be synchronized between the FTP Server module and the File Sync module. |
|  | Files | A color-coded field that shows the status of the transfers. <ul style="list-style-type: none"> Green = normal operation. Red = problem with transfers. |
|  | Clock | Shows the amount of time that the OpX One FTP server has been running. |

11.2.3 FTP Server Status

The FTP Server status shows any activity on the FTP Server module, such as files that are being retrieved and the status of the FTP Server itself.

```
[13:46:10] File modified: D:\WBSI\Config\SerialServer Settings.xml
[13:46:10] File modified: D:\WBSI\Config\SerialServer Settings.xml
[13:46:30] File modified: D:\WBSI\Config\Device_TALK1.xml
[13:46:30] File modified: D:\WBSI\Config\SerialServer Settings.xml
[13:46:30] File modified: D:\WBSI\Config\SerialServer Settings.xml
[13:46:44] Storing updates for: D:\WBSI\Config\Device_AUD1.xml
[13:46:53] File modified: D:\WBSI\Config\Device_AUD1.xml
[13:46:53] File modified: D:\WBSI\Config\Device_AUD1.xml
[13:46:53] File modified: D:\WBSI\Config\SerialServer Settings.xml
[13:46:53] File modified: D:\WBSI\Config\SerialServer Settings.xml
[13:47:04] Storing updates for: D:\WBSI\Config\Device_TALK1.xml
[13:47:24] Storing updates for: D:\WBSI\Config\SerialServer Settings.xml
[13:47:31] Storing updates for: D:\WBSI\Config\Device_AUD1.xml
[14:24:16] FTP Server started
```

11.2.4 FTP Server Status List

The bottom of the FTP Server module shows the FTP server status list. This list shows status of various connections to the FTP Server module.

| Type | Address | Station | Module | Status | Last Reply |
|------|---------|---------|--------|--------|------------|
| | | | | | |

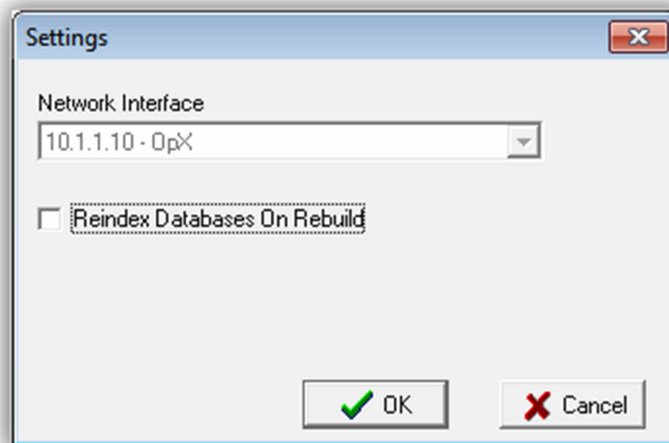
11.3 Configuring the FTP Server Module

Before you use the FTP Server module, you must configure its settings. After setting up the FTP Server, you add devices with which the module will communicate.

➤ **To configure the FTP Server module settings**

1. On the **Edit** menu, click **Settings**.

The Settings dialog box appears.



2. Complete the fields in the dialog box (see Table 11-2).
3. Click **OK**.

Table 11-2. Fields in the Settings Dialog Box

| Field | Description | Default |
|-----------------------------|--|---------------------|
| Network Interface | If the OpX One system detects multiple NICs, this drop-down list allows you to select the NIC you want the FTP Server to use. If you have a single NIC on your machine, the FTP Server selects that NIC automatically, and the drop-down will be gray and unavailable. | 10.1.1.10 – OpX One |
| Reindex Database On Rebuild | Do not change the default setting unless otherwise instructed by BSI support. | Unchecked |

11.4 Starting and Stopping the FTP Server

➤ **To start the OpX One FTP server**



1. Click the **Start FTP Server** button

A message in the FTP server status list shows that the FTP server started. If this message does not appear, check the FTP server settings (see section 11.3).

- **To stop the OpX One FTP server**



1. Click the **Stop FTP Server** button

A message in the FTP server status list shows that the FTP server stopped. If this message does not appear, check the FTP server settings (see section 11.3).

12 Data Repeater Module

Topics:

- ^ *Starting the Data Repeater Module (page 302)*
- ^ *Quick Tour (page 303)*
- ^ *Working with Data Repeaters (page 307)*
- ^ *Changing the Network Interface and Port (page 313)*
- ^ *Starting and Stopping the Data Repeater (page 313)*

This chapter describes the OpX One Data Repeater module.

The Data Repeater module takes the PAD data output from the Audio Server, reformats it if needed, and sends it to multiple destinations, such as to RDS or stream encoders.

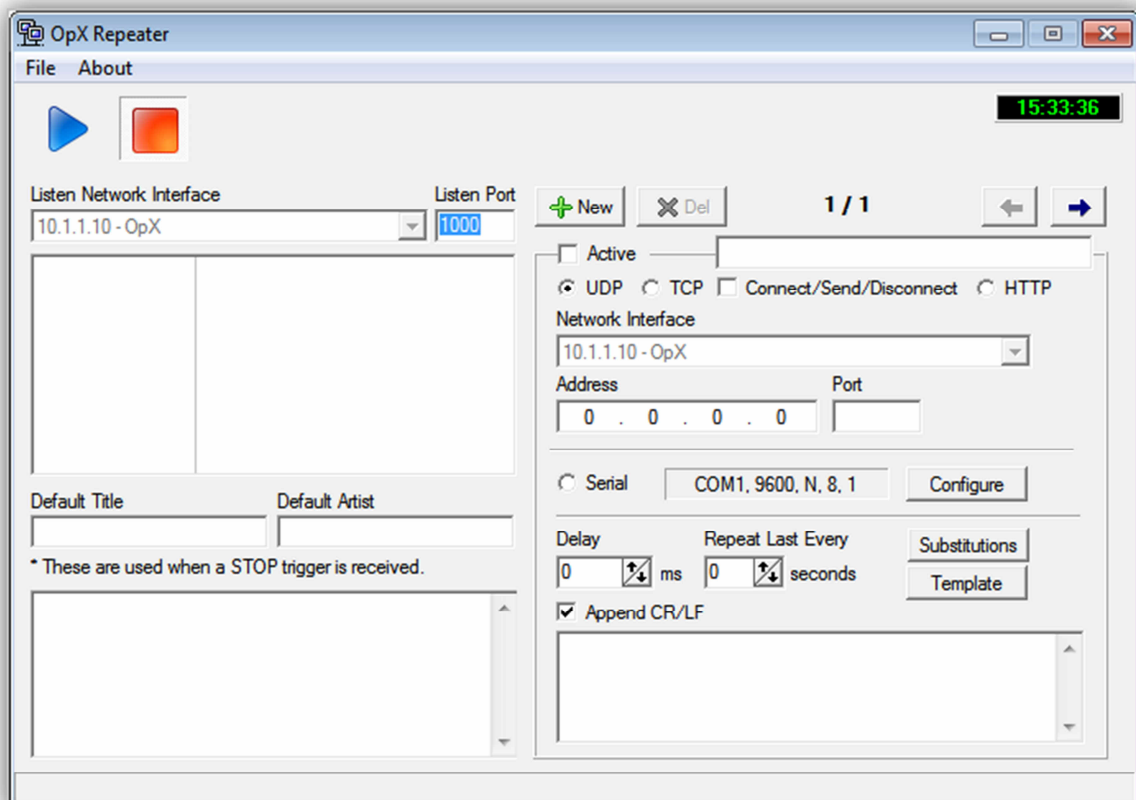
12.1 Starting the Data Repeater Module

You must start the File Server module before you start the Data Repeater module.

➤ **To start the Data Repeater module**

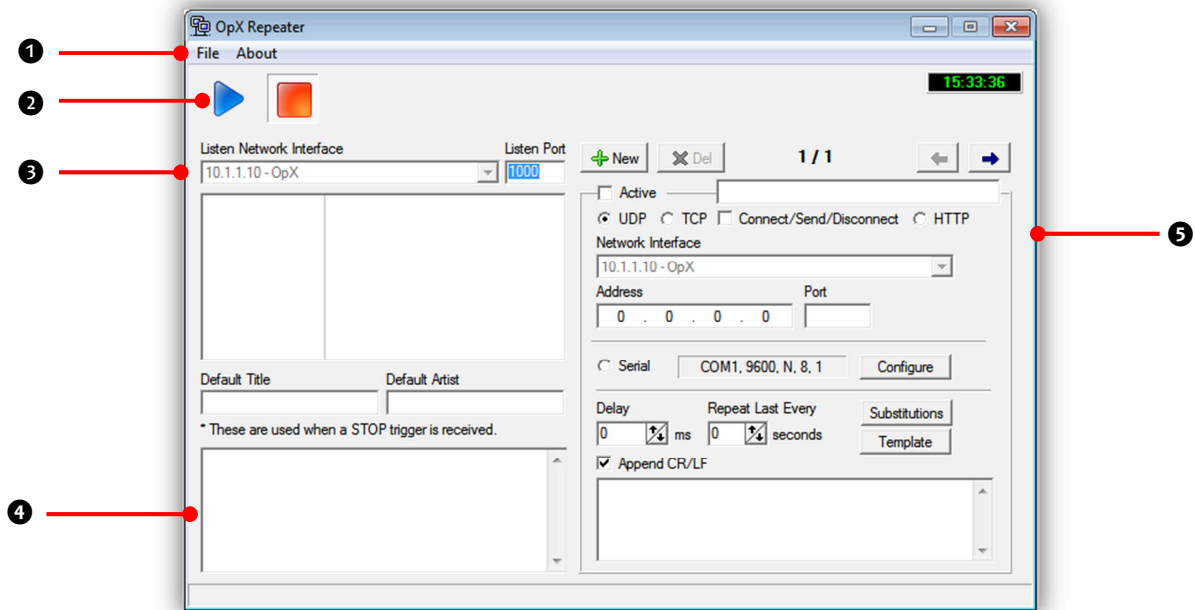
1. Start the File Server module (see section 3.1).
2. Click the Windows Start button and click **Programs > Broadcast Software > OpX One Repeater**.

An OpX One Repeater window similar to the following appears.



12.2 Quick Tour

The following sections provide a quick tour of the Data Repeater module interface.

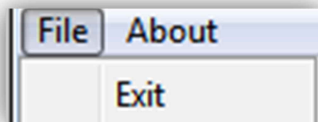


| Number | Description |
|--------|--|
| 1 | Menu bar. See section 12.2.1. |
| 2 | Tool bar. See section 12.2.2. |
| 3 | Data repeater settings. See section 12.2.3. |
| 4 | Data repeater status list. See section 12.2.4. |
| 5 | Data repeater parameters. See section 12.3. |

12.2.1 Menu Bar

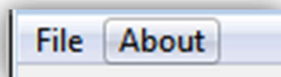
The menu bar appears at the top of the Data Repeater window. The following sections describe the menu options.

12.2.1.1 File Menu



Exit = exits the Data Repeater module.

12.2.1.2 About Menu



Opens a window that shows the version and build date of the Data Repeater module you are running. This window also shows the amount of memory, virtual memory being used, and the amount of time that the data repeater has been running. See Figure 12-1 for an example. To close the window, click **OK**.

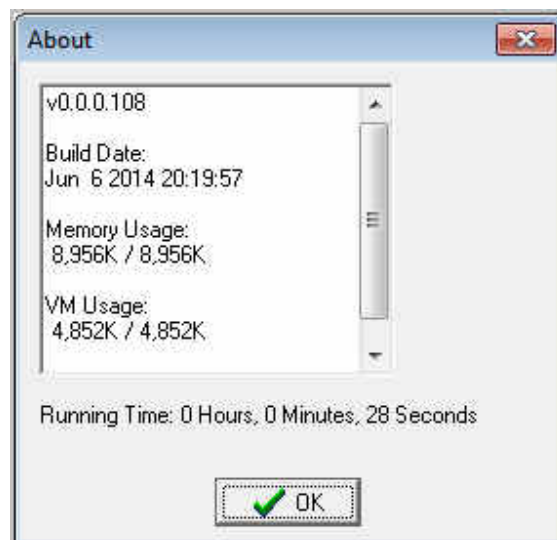
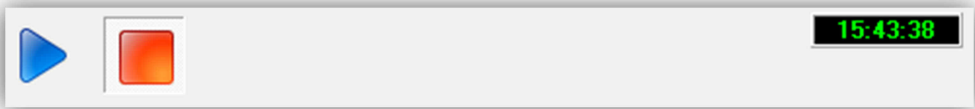


Figure 12-1. Example of About Information

12.2.2 Tool Bar

The Data Repeater module tool bar appears below the menu bar.



Moving the screen pointer over a tool displays the tool's function as a tooltip. For example:

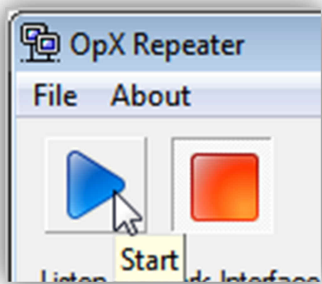



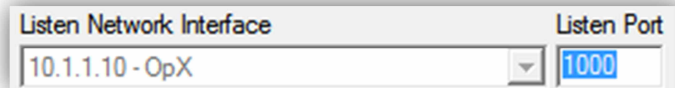


Table 11-1 describes the tools on the tool bar.

Table 12-1. Data Repeater Module Tool Bar

| Tool | Tool Name | Description |
|---|-----------|---|
|  | Start | Starts the Data Repeater. See section 11.4. |
|  | Stop | Stops the Data Repeater. See section 11.4 |
|  | Clock | Shows the amount of time that the Data Repeater has been running. |

12.2.3 Data Repeater Interface and Port



The screenshot shows a configuration window with two fields. The first field, labeled 'Listen Network Interface', is a drop-down menu currently displaying '10.1.1.10 - OpX'. The second field, labeled 'Listen Port', is a text input box containing the number '1000'.

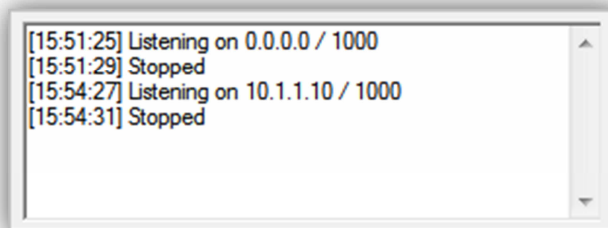
The **Listen Network Interface** and **Listen Port** fields show the IP address and port that the current data repeater is using to communicate.

If the OpX One system detects multiple NICs, this drop-down list allows you to select the NIC you want the data repeater to use. If you have a single NIC on your machine, OpX One selects that NIC automatically, and the drop-down will be gray and unavailable.

If you want to change the port number that the current data repeater is using, change the value in the **Listen Port** field.

12.2.4 . Data Repeater Status List

The data repeater status list shows when the OpX One data repeater is listening using the IP address and port number shown in the list. The IP address and port number are separated by a slash (/). This list also shows when the data repeater stops.



The screenshot shows a status list window with a scrollable area containing the following log entries:

- [15:51:25] Listening on 0.0.0.0 / 1000
- [15:51:29] Stopped
- [15:54:27] Listening on 10.1.1.10 / 1000
- [15:54:31] Stopped

12.3 Working with Data Repeaters

The right side of the OpX One Repeater window provides buttons and fields for creating, editing, and deleting data repeaters.

12.3.1 Creating a Data Repeater

➤ To configure a data repeater

1. You cannot create a data repeater while another data repeater is running. Check the data repeater status list to ensure that a data repeater is not running. If one is running, click the **Stop** button on the tool bar.


2. Click the **New** button



3. Complete the fields on the right side of the window (see Table 12-2).

Data Repeater Module

Table 12-2. Fields in the OpX One Repeater Window

| Field | Description | Default |
|----------------------|---|---------------------|
| Active | You can set up multiple data repeaters, but only one can be active. To make this repeater check this check box. | Unchecked |
| UCP/TCP/HTTP | Select the protocol that the data repeater will use. | UCP |
| Network Interface | If the OpX One system detects multiple NICs, this drop-down list allows you to select the NIC you want the Data repeater to use. If you have a single NIC on your machine, the Data repeater selects that NIC automatically, and the drop-down will be gray and unavailable. | 10.1.1.10 – OpX One |
| Address | Enter the IP address for the data repeater. | 0.0.0.0 |
| Port | Enter the number of the port that the data repeater will use for communications. | — |
| Serial | <p>If the device with which the data repeater will be communicating requires serial parameters be configured:</p> <ol style="list-style-type: none"> 1. Click Serial. 2. If the serial device uses settings other than the OpX One defaults, click the Configure button to display the Serial Device dialog box (see Figure 12-2). 3. Configure the settings based on the requirements of your serial device (refer to the documentation for your serial device). 4. Click OK. | COM1, 9600, N,8.1 |
| Delay | Number of milliseconds between when data is received and when data is transmitted. This feature can be used to guard against profanities from being sent over the airwaves. | 0 |
| Repeat Last Every | Number of seconds when received data is transmitted repeatedly. | 0 |
| Substitutions button | <p>If substitutions are applicable to your setup:</p> <ol style="list-style-type: none"> 1. Click the Substitutions button to display the Substitutions dialog box (see Figure 12-3 on page 309). 2. Click the Add button  to display the Substitutions dialog box (see Figure 12-4 on page 310). 3. Complete the fields in the dialog box (see Table 12-3 on page 310). 4. Click the OK button two times. <p>The Substitution dialog box also has buttons for editing and deleting substitutions.</p> | — |
| Template button | <p>If templates are applicable to your setup:</p> <ol style="list-style-type: none"> 1. Click the Template button to display the Template dialog box (see Figure 12-5 on page 311). 2. Click the buttons at the top of the dialog box to define your template. 3. Click the OK button. | — |
| Append CR/LF | <ul style="list-style-type: none"> • Checked = appends a carriage return when a line feed is received. • Unchecked = do not append a carriage return when a line feed is received. | Checked |

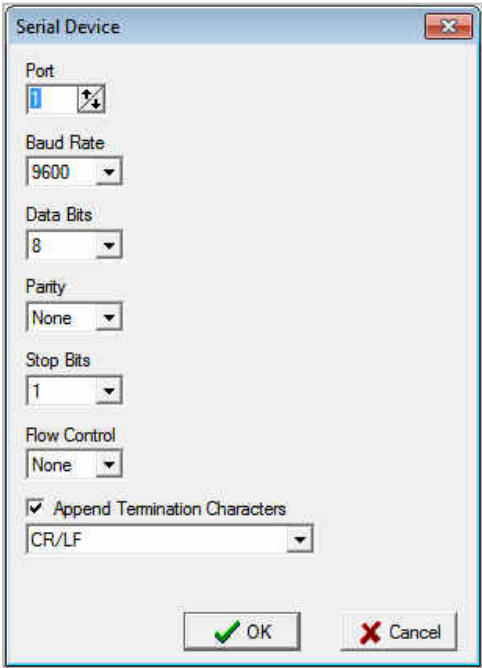


Figure 12-2. Serial Device Dialog Box

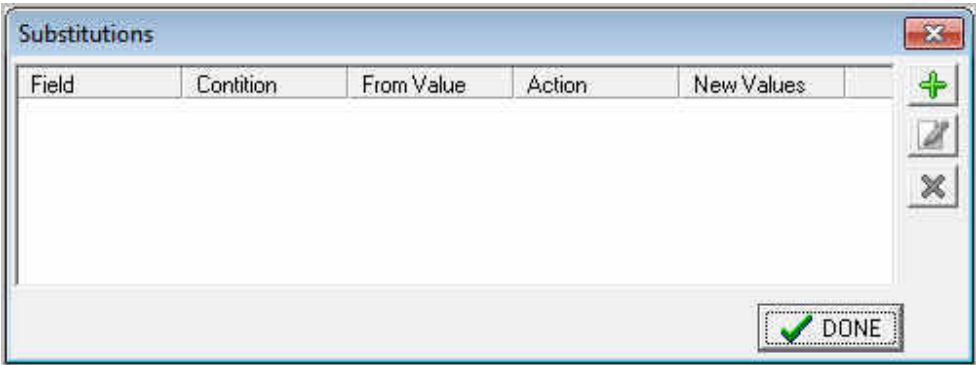


Figure 12-3. Substitutions Dialog Box

Substitution

Field

Condition

Contains

From Value

Ignore

Substitute

New CutID

New Title

New Artist

New Length

New Folder

New Category

New Type

OK

Cancel

Figure 12-4. Substitution Dialog Box

Table 12-3. Fields in the Substitution Dialog Box

| Field | Description | Default |
|------------|--|----------|
| Field | File to be searched for a specific string of text. | — |
| Condition | Condition associated with the search. | Contains |
| From Value | String that is being searched. | — |
| Ignore | Allows you to skip the data shown at the bottom of the dialog box. | — |
| Substitute | Replaces the string with the values shown at the bottom of the dialog box. | — |



Note: Leave the tab blank for raw output.

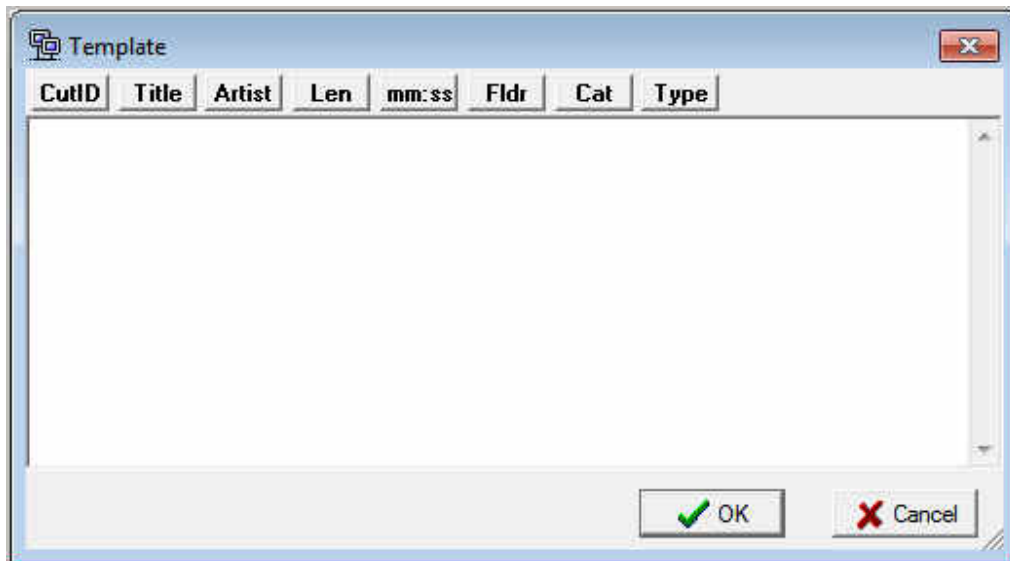


Figure 12-5. Template Dialog Box

12.3.2 Editing a Data Repeater

There may be times when you need to edit a data repeater. For example, you might have to change the serial settings.

➤ **To edit a data repeater**

1. You cannot edit a data repeater while a data repeater is running (either the one you want to edit or a different repeater). Check the data repeater status list to ensure that a data repeater is not running. If one is running, click the **Stop** button on the tool bar.
2. On the right side of the OpX One Repeater window, use the scroll arrows to find the data repeater you want to edit (see Figure 12-6). The field to the left of the arrows shows the number for the current data repeater and the total number of data repeaters that have been set up (for example, **2/5** means the settings for data repeater number 2 is displayed out of 5 data repeaters that have been set up).

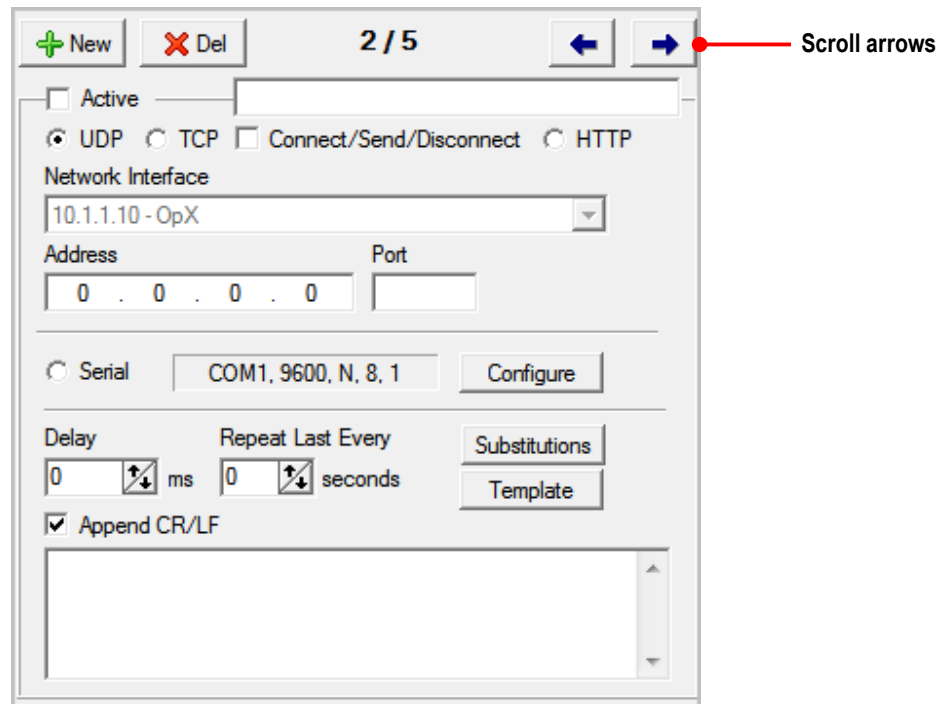


Figure 12-6. Scroll Arrows

3. Change the fields on the right side of the window (see Table 12-2 on page 308).

12.3.3 Deleting a Data Repeater

If you no longer need a data repeater, you can delete it from the OpX One system.



Note: A precautionary message does not appear before you delete a data repeater. Therefore, be sure you do not need a data repeater before you delete it. You cannot undo a data repeater after it has been deleted.

➤ To delete a data repeater

1. You cannot delete a data repeater while a data repeater is running (either the one you want to delete or a different repeater). Check the data repeater status list to ensure that a data repeater is not running. If one is running, click the **Stop** button on the tool bar.
2. On the right side of the OpX One Repeater window, use the scroll arrows to find the data repeater you want to delete (see Figure 12-6).

3. Click the **Delete** button



12.4 Changing the Network Interface and Port

The OpX One Repeater window has a **Listen Network Interface** drop-down list and a **Port** button that make it easy to change these values for the currently used data repeater (see Table 12-4).

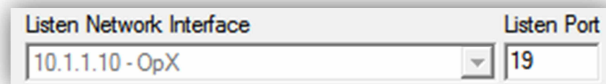


Table 12-4. Listen Network Interface and Port Fields in the OpX One Repeater Window

| Field | Description | Default |
|--------------------------|--|---------------------|
| Listen Network Interface | If the OpX One system detects multiple NICs, this drop-down list allows you to select the NIC you want the data repeater to use. If you have a single NIC on your machine, the data repeater selects that NIC automatically, and the drop-down will be gray and unavailable. | 10.1.1.10 – OpX One |
| Port | Enter the number of the port that the data repeater will use for communications. | — |

12.5 Starting and Stopping the Data Repeater

➤ To start the OpX One Data Repeater



1. Click the **Start** button

A message in the Data Repeater status list shows that the Data Repeater started. If this message does not appear, check the Data Repeater network interface and ports.

➤ To stop the OpX One Data Repeater



1. Click the **Stop** button

A message in the Data Repeater status list shows that the Data Repeater stopped. If this message does not appear, check the Data Repeater network interface and ports.

13 Mobile Gateway/Client Module

Topics:

- ^ *Starting the Mobile Gateway/Client Module (page 315)*
- ^ *Quick Tour (page 317)*
- ^ *Configuring the Mobile Gateway/Client Module (page 320)*
- ^ *Starting and Stopping the Mobile Gateway/Client (page 321)*

This chapter describes the OpX One Mobile Gateway/Client module.

The Mobile Gateway/Client module is used for IOS remote operation. The gateway runs on the OpX One network and allows access from the IOS device.

13.1 Starting the Mobile Gateway/Client Module

You must start the File Server module before you start the Mobile Gateway/Client module.

➤ **To start the Mobile Gateway/Client module**

1. Start the File Server module (see section 3.1).
2. Click the Windows Start button and click **Programs > Broadcast Software > OpX One Mobile Gateway**.

A Settings dialog box similar to the following appears.

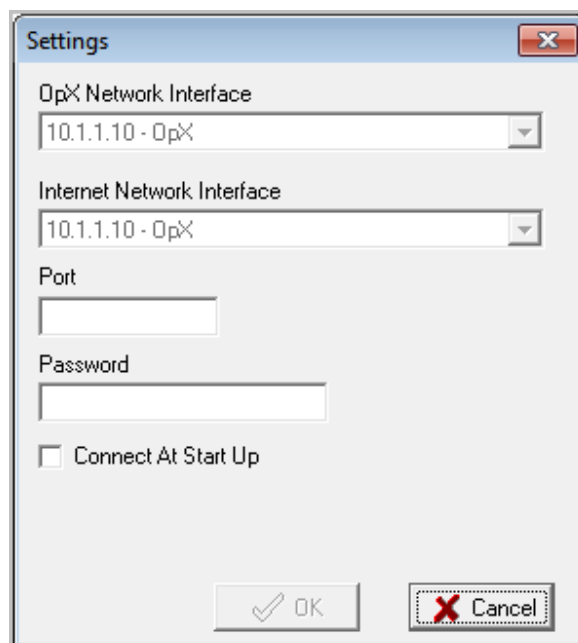


Figure 13-1. Settings Dialog Box

3. Complete the fields in the dialog box (see Table 13-1).
4. Click **OK**.

Table 13-1. Fields in the Settings Dialog Box

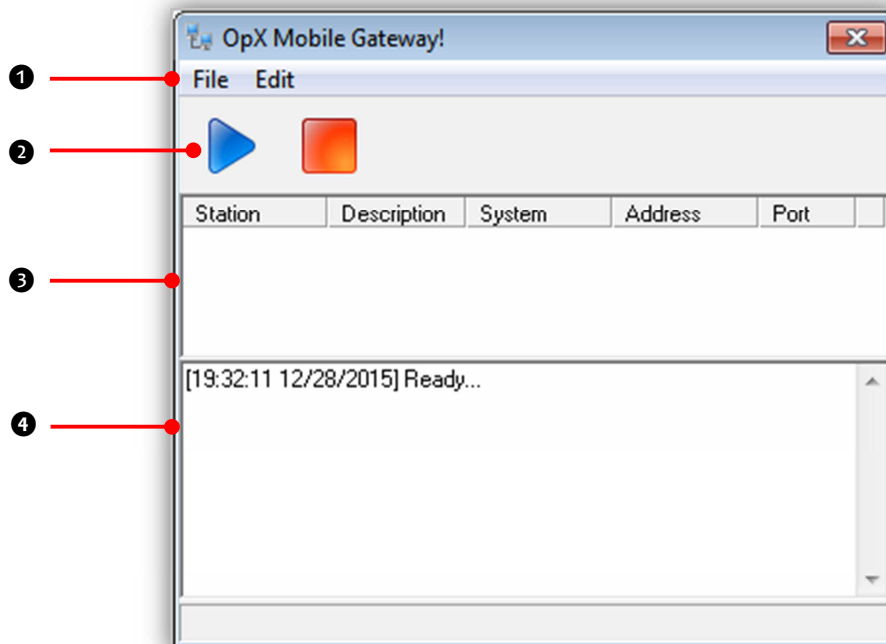
| Field | Description | Default |
|---------------------------|--|---------------------|
| OpX One Network Interface | If the OpX One system detects multiple NICs, this drop-down list allows you to select the NIC you want the mobile gateway/client module to use for accessing the OpX One network. If you have a single NIC on your machine, the mobile gateway/client module selects that NIC automatically, and the drop-down will be gray and unavailable. | 10.1.1.10 – OpX One |

Mobile Gateway/Client Module

| Field | Description | Default |
|----------------------------|---|---------------------|
| Internet Network Interface | If the OpX One system detects multiple NICs, this drop-down list allows you to select the NIC you want the mobile gateway/client module to use for accessing the Internet. If you have a single NIC on your machine, the mobile gateway/client module selects that NIC automatically, and the drop-down will be gray and unavailable. | 10.1.1.10 – OpX One |
| Port | Enter the number of the port that the mobile gateway/client module will use for communications. | — |
| Password | Enter the case-sensitive password for accessing the mobile gateway/client module. Record the password for future reference. | — |
| Connect At Startup | Select whether you want the mobile gateway/client module to start (check) or not start (uncheck) automatically when the OpX One system starts. If configured to start automatically, a Mobile Gateway/Client module icon appears in the system tray. | Unchecked |

13.2 Quick Tour

The following sections provide a quick tour of the Mobile Gateway/Client module interface.

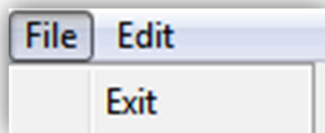


| Number | Description |
|--------|--|
| ① | Menu bar. See section 13.2.1. |
| ② | Tool bar. See section 13.2.2. |
| ③ | Connection list. See section 13.2.3. |
| ④ | Module status panel. See section 13.2.4. |

13.2.1 Menu Bar

The menu bar appears at the top of the Mobile Gateway/Client window. The following sections describe the menu options.

13.2.1.1 File Menu



Exit = exits the Mobile Gateway/Client module.

13.2.1.2 Edit Menu



Settings = displays the Settings dialog box in Figure 13-1 on page 315.

13.2.2 Tool Bar

The Mobile Gateway/Client module tool bar appears below the menu bar.

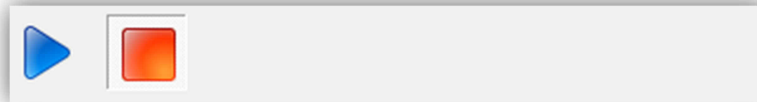




Table 11-1 describes the tools on the tool bar.

Table 13-2. Mobile Gateway/Client Module Tool Bar

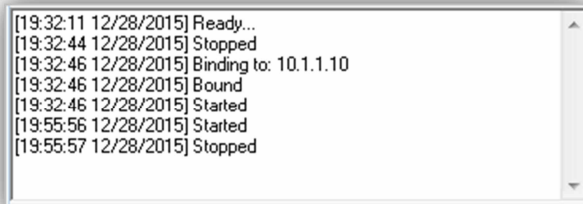
| Tool | Tool Name | Description |
|---|-----------|--|
|  | Start | Starts the Mobile Gateway/Client module and places a Mobile Gateway/Client module icon in the system tray. |
|  | Stop | Stops the Mobile Gateway/Client module. |

13.2.3 Connection List

The connection list shows the connections to the Mobile Gateway/Client module.

13.2.4 Module Status Panel

The module status panel shows the status of the Mobile Gateway/Client module.



13.3 Configuring the Mobile Gateway/Client Module

The Mobile Gateway/Client module prompts you for settings the first time you launch it.

If you need to change these settings, use the following procedure.

➤ **To change the Mobile Gateway/Client module settings**

1. If the Mobile Gateway/Client module is not displayed, double-click its icon in the system tray.

The OpX One Mobile Gateway window appears.

2. On the **Edit** menu, click **Settings**.

The Settings dialog box appears (see Figure 13-1 on page 315).

3. Complete the fields in the dialog box (see Table 13-1 on page 315).
4. Click **OK**.

13.4 Starting and Stopping the Mobile Gateway/Client

- To start the OpX One Mobile Gateway/Client

1. Click the **Start** button



A message in the module status panel shows that the Mobile Gateway/Client started. If this message does not appear, check the Mobile Gateway/Client settings (see section 13.3).

- To stop the OpX One Mobile Gateway/Client

1. Click the **Stop** button



A message in the module status panel shows that the Mobile Gateway/Client stopped. If this message does not appear, check the Mobile Gateway/Client settings (see section 13.3).

14 Audio Server Watchdog Module

Topics:

- ^ *Starting the Watchdog Module (page 323)*
- ^ *Quick Tour (page 324)*
- ^ *Configuring the Audio Server Watchdog Timer (page 326)*
- ^
- ^ *Starting and Stopping the Audio Server Watchdog Timer (page 328)*


This chapter describes the OpX One Audio Server Watchdog module.

The Audio Server Watchdog module is a precautionary module that monitors the Audio Server process. If the Audio Server Watchdog module detects that the Audio Server stopped responding (or is “hanging”), it restarts the Audio Server module automatically.

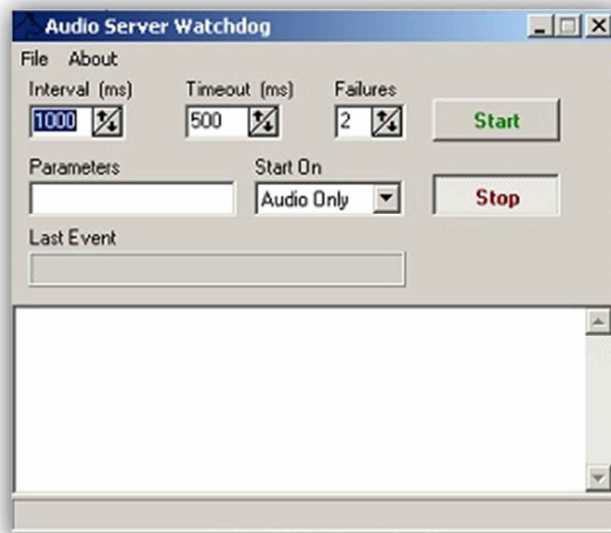
14.1 Starting the Watchdog Module

You must start the File Server module before you start the Watchdog module.

➤ **To Start the Audio Server Watchdog module**

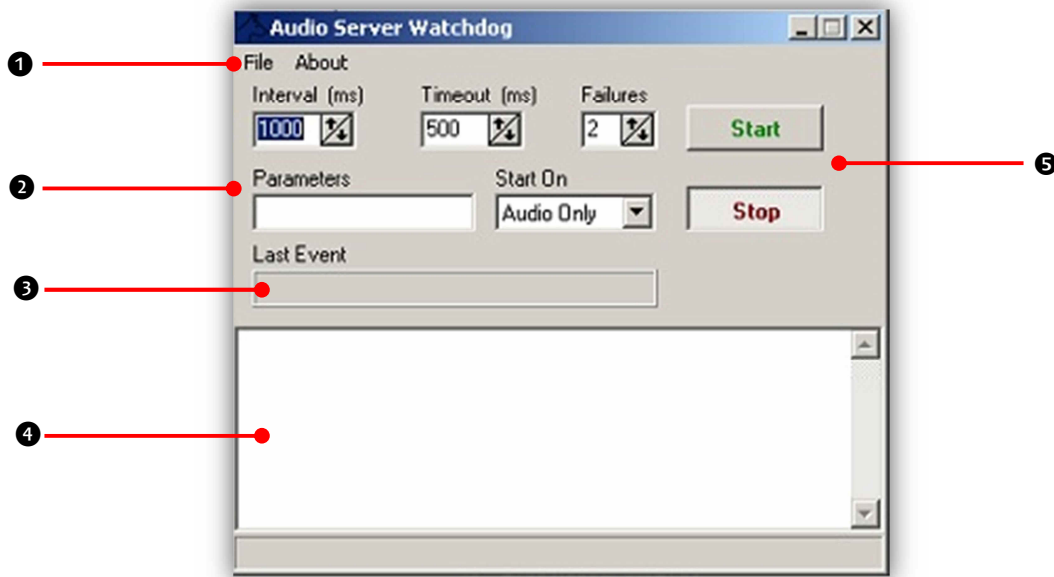
1. Start the File Server module (see section 3.1).
2. Double-click the Audio Server Watchdog icon on your desktop  or click the Windows Start button and click **Programs > Broadcast Software > OpX One Audio Server Watchdog**.

An Audio Server Watchdog window similar to the following appears.



14.2 Quick Tour

The following sections provide a quick tour of the Audio Server Watchdog module interface.

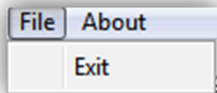


| Number | Description |
|--------|--|
| ❶ | Menu bar. See section 14.2.1. |
| ❷ | Parameters. See section 0. |
| ❸ | Last Event field. See section 0. |
| ❹ | Status area. See section 14.2.3. |
| ❺ | Start and Stop buttons. See section 0. |

14.2.1 Audio Server Watchdog Module Menu Bar

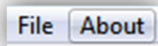
The menu bar appears at the top of the Audio Server Watchdog window. The following sections describe the menus on the menu bar.

14.2.1.1 File Menu



Exit = exits the Audio Server Watchdog module.

14.2.1.2 About Menu



Opens a window that shows the version and build date of the Audio Server Watchdog module you are running. This window also shows the amount of memory and virtual memory being used, and the amount of time that the Audio Server Watchdog module has been running. See Figure 14-1 for an example. To close the window, click **OK**.

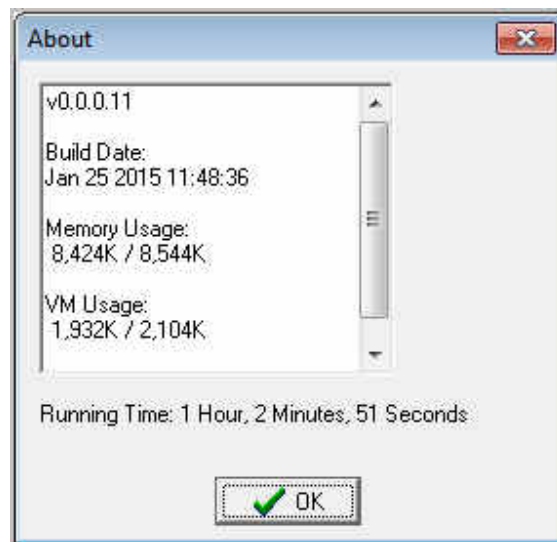
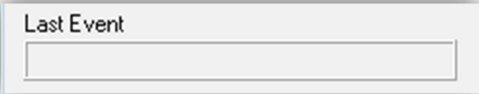


Figure 14-1. Example of About Information

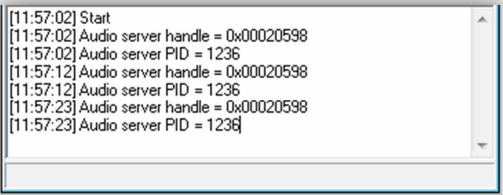
14.2.2 Last Event Field

The **Last Event** field shows the date and time when the Audio Server Watchdog module detected that the Audio Server was not responding.



14.2.3 Status Area

The **Status** area shows the status of the Audio Server Watchdog time.



14.3 Configuring the Audio Server Watchdog Timer

You configure the Audio Server Watchdog Timer module using the fields on the module window. Figure 14-2 shows the fields and Table 14-1 describes them.

Audio Server Watchdog Module



Figure 14-2. Audio Server Watchdog Module Configuration Fields

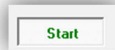
Table 14-1. Audio Server Watchdog Module Configuration Fields

| Field | Description | Default |
|---------------|---|------------|
| Interval (ms) | How often the Audio Server Watchdog module checks that the Audio Server is running. | 1000 |
| Timeout (ms) | The maximum number of timeouts that must occur before the Audio Server Watchdog module resets the Audio Server. | 500 |
| Failures (ms) | The maximum number of failures that must occur before the Audio Server Watchdog module resets the Audio Server. | 2 |
| Parameters | Enter any of the following optional parameters you want to run with the Audio Server. Before using these parameters contact BSI technical support. <ul style="list-style-type: none"> • <code>-auxiliary</code> = starts the Audio Server as an auxiliary instead of as aa primary. • <code>- fs <ip address></code> = tells the Audio Server where the file server is located. • <code>-nic <ip address></code> = tells the Audio Server to use a specific network-interface card to use on the system. | — |
| Start On | Allows the Audio Server to start on a non-audio log item or requires the Audio Server to start on an audio item. | Audio Only |

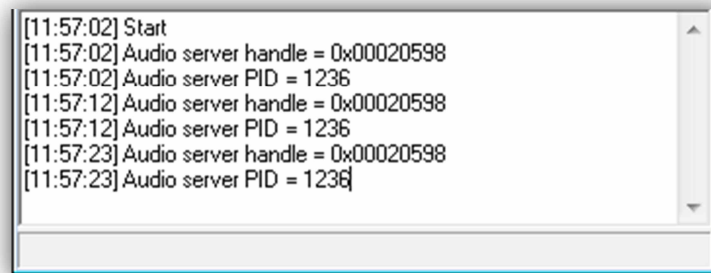
14.4 Starting and Stopping the Audio Server Watchdog Timer

➤ To start the Audio Server Watchdog Timer

1. Click the **Start** button



Messages in the status area show that the Audio Server Watchdog Timer started.



➤ To stop the Audio Server Watchdog Timer

1. Click the **Stop** button



15 Troubleshooting

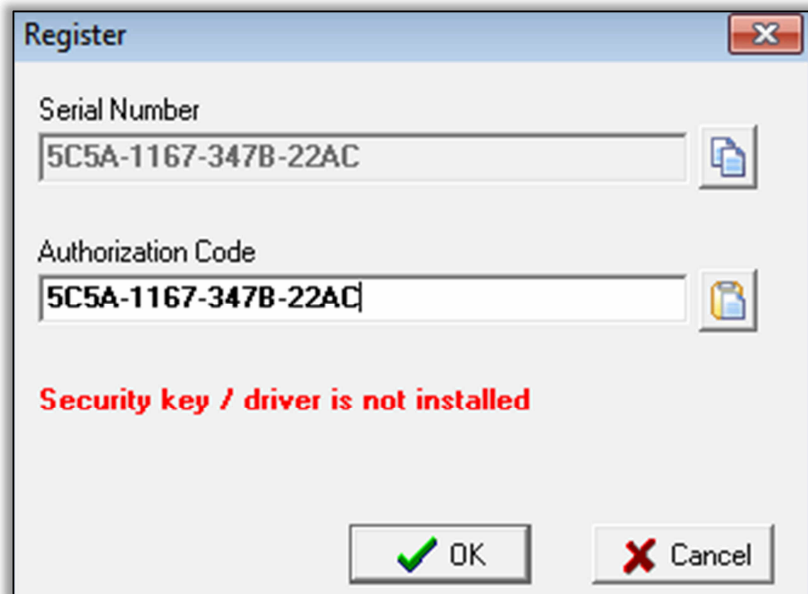
Topics:

- ^ *“Security key / driver is not installed” Message (page 330)*
- ^ *Program Does Not Activate (page 331)*

In the unlikely event you encounter a problem using OpX One, refer to the information in this chapter to identify and correct the problem.

15.1 “Security key / driver is not installed” Message

If the message **Security key / driver is not installed** appears when you launch the File Server module or click **Edit > Register**:



1. Be sure the BSI-supplied dongle is inserted into a working USB port on your computer.
2. Remove the dongle and re-insert it into another USB port that is known to work. Confirm that a message in the system tray states that the device driver is being installed.



3. If all troubleshooting efforts fail, contact BSI technical support.

15.2 Program Does Not Activate

If your program does not activate:

1. Check the version of your program (**Help > About**) and confirm that it matches the code version given.
2. To avoid possible typing errors, copy the code and serial numbers provided, and paste them into the appropriate fields. Otherwise, check the characters in the authorization code:
 - a. Codes are entered with all uppercase letters and a dash after every four characters.
 - b. Codes contain the letters **A – F** only.
 - c. The programs take up to 60 seconds to activate.
3. Is there a dongle key inserted into the same computer that is running your program?
4. Is your program using the dongle key serial number?
5. Do you have the latest version of the Sentinel hardware key drivers installed (see section 2.4).
6. If all troubleshooting efforts fail, contact BSI technical support.

Appendix A - Macros

Topics:

- ^ *List of Macros (page 333)*
- ^ *Macro Descriptions (page 335)*

This chapter describes the OpX One macros.

In OpX One, the term “macro” refers to commands that may use variables to allow you to perform automation functions. Using macros, for example, you can record audio files, send data via the serial port, enable or disable hardware devices, switch OpX One’s playback mode, and add a comment to your program log.

You can add macros to program logs, carts, scheduled events, triggers, clocks, and Hot Keys.

Macros have a specific syntax that must be followed. In this appendix, macro names are shown in capital letters, required variables are enclosed in [brackets], and optional variables are enclosed in {squiggly brackets}.



Tip: Most users will not need to enter macros manually because the Clock Builder module enters automatically the most commonly used macros.

A.1 List of Macros

Table 15-1 lists the macros in alphabetical order and describes their function. For more information about a macro, go to the page in the “See Page” column.



Note: Some macros have abbreviated or alternate names that can be used to execute them. The `TCPOUT`, macro, for example, can also be executed by typing `UDPOUT`, `IPOUT`, or `IPSEND` instead of `TCPOUT`. If a macro has one or more alternative names, the names are shown in parentheses in the heading of the macro.

Table 15-1. Macros

| Macro | Description | See Page |
|----------------------|--|----------|
| ADDTORUNLOG | Adds an entry to the run log. | 335 |
| APPLICATION | Runs the specified application. | 335 |
| ATTIME | Runs a command at a specified time. | 336 |
| AUTOFILLENABLE | Enables or disables auto-fill. | 336 |
| CHANNELRELAY | Enables or disables channel relays. | 337 |
| CLEARASYNC | Clears items from the auxiliary deck. | 338 |
| CLOSURE | Fire a specified closure. | 338 |
| COMMENT | Adds comments to your log. | 339 |
| COMMERCIALBREAKBEGIN | Starts a commercial break. | 340 |
| COMMECIALBREAKEND | Ends a commercial break. | 341 |
| CONSOLEOUT | Sends a command to an Axia console. | 341 |
| DECKTIMER | Superimposes a countdown timer over the top deck on the Studio Client Playback Deck Stack. | 342 |
| DEVICE | Enable or disables the use of a hardware I/O device. | 343 |
| FADECURRENT | Fades out the currently playing items. | 344 |
| FADEOUTLASTITEM | Looks ahead from the current item for a @ time-immediate cue, and then backs up to find an audio item before the time-immediate event. | 344 |
| FLUSHEVENTLOG | Flushes the run log. | 344 |
| GETFILLFILES | Scans the folders for your station that contain Fill material, and copy any new or modified files to the Audio Server's local folder. | 345 |
| GETPROGRAMLOGS | Updates program logs form the file server. | 346 |
| GETVOICETRACKS | Gets voicetracks from the file server program log for the specified hour. | 346 |
| LOADLOG | Loads a program log. | 347 |
| LOADLOGFROMSERVER | Loads a program log from the file server. | 348 |

Macros

| Macro | Description | See Page |
|---------------------|---|----------|
| LOADSCHED | Loads a Scheduled Event Set. | 348 |
| LOADSCHEDULEDEVENTS | Switches between different Scheduled Events sets. | 349 |
| LOADTRIGGERS | Loads a trigger set. | 350 |
| MIXFADE | Forces one of the Audio Server's configured mixers to fade in, fade out, or fade to a specific level. | 351 |
| MIXVOLUME | Forces one of the Audio Server's configured mixers to cut to a specific volume level instantly. | 352 |
| MODE | Set the automation mode. | 353 |
| PADENABLE | Enables or disables PAD output. | 354 |
| PADOUT | Outputs PAD from the specified parameters. | 354 |
| PAUSE | Wait for pause time. | 355 |
| PLAYASYNC | Plays an audio file in the auxiliary playback deck. | 355 |
| PLAYTIMESHIFT | Plays a file in the timeshift deck. | 356 |
| RECORD | Records a file in the background. | 357 |
| RELAY | Runs a relay command. | 359 |
| RESETCART | Resets a cart to play at the first item. | 360 |
| RUN | Starts the next item regardless of cue. | 360 |
| RUNAPPLICATION | Allows you to enter the path to an executable file on your Audio Server machine. | 361 |
| SAVEPROGRAMLOG | Saves the program log. | 361 |
| SATSHOW | Starts or stops a satellite show. | 362 |
| SATSHOWTIMER | Shows a sat show count-up in the playback deck. | 363 |
| SCHED | Enables or disables the execution of scheduled events loaded in the Audio Server | 364 |
| SCHEDULEDEVENTS | Turns the scheduled events function on or off. | 365 |
| SENDPAD | Outputs PAD from a file name. | 366 |
| SERIALOUT | Sends a serial string out the serial port of any configured serial device. | 366 |
| START | Starts playback of the next event in your program log. | 367 |
| STARTDECK | Starts the specified deck. | 367 |
| STARTNEXT | Similar to the 'START' macro, but changes its behavior based on the state of the Playback Deck Stack. | 368 |
| STARTENABLE | Enables or disables the start command. | 368 |
| STEPTHROUGH | Allows you to turn the Step-Through function on or off. | 369 |
| STOP | Stops playback of all events being played by the Playback Deck Stack. | 370 |
| STOPDECK | Stops the specified deck. | 370 |
| SYNCRECORDSFOLDER | Immediately syncs the Records folder to the file server. | 371 |

Macros

| Macro | Description | See Page |
|--------------------|--|----------|
| SUNCYRUNLOGSFOLDER | Immediately syncs the RunLogs folder to the file server. | 371 |
| TCPOUT | Sends a command to a TCP/UDP device | 372 |
| TIMEDBLOCKSTART | Specifies the length of a block of audio. | 373 |
| TIMEDBLOCKEND | | 374 |
| TIMEEVENTS | Changes the Time Events mode on the Audio Server. | 375 |
| TIMESCALEITEM | Sets the time scaling for the specified program log item. | 376 |
| TRIGGERS | Enables or disables the trigger functionality of the Audio Server. | 377 |
| TRIM | Trims silence from the specified file | 378 |

A.2 Macro Descriptions

A.2.1 ADDTORUNLOG (or RUNLOG)

This macro adds an entry to the run log.

ENTRY FORMAT

```
ADDTORUNLOG [CATEGORY], [DESCRIPTION]
```

VARIABLES

- **CATEGORY** = adds a category that can be used as a key when running reports.
- **DESCRIPTION** = any text.

EXAMPLE

This example adds the entry **BROWNS BENGALS GAME STARTED** to the run log.

```
ADDTORUNLOG INFO, BROWNS BENGALS GAME STARTED
```

A.2.2 APPLICATION (or APP)

This macro runs an external application.

ENTRY FORMAT

```
APPLICATION [NAME]
```

VARIABLES

- `NAME` = name of the application you want to run.

A.2.3 ATTIME

This macro runs a command at a specified time.

ENTRY FORMAT

```
ATTIME [TIME], [COMMAND]
```

VARIABLES

- `TIME` =time, in mm:ss format, when the command will run. Add a plus sign (+) in front of this variable to specify forward relative time. For example, +0100 corresponds to one minute from the present time. Omitting the plus sign allows you to include a scheduled event in the program log. For example, 18000 means that an event will run at 18:00 (6:00 pm).
- `COMMAND` = command that is to run.

EXAMPLE 1

```
ATTIME +0010, START
```

A.2.4 AUTOFILLENABLE (or ENABLEAUTOFILL, FILLENABLE, or ENABLEFILL)

This macro enables or disables auto-fill.

ENTRY FORMAT

```
AUTOFILL [ "ON / OFF" ]
```

VARIABLES

- ON = enable autofill.
- OFF = disable autofill.

EXAMPLE 1

```
AUTOFILL ON
```

A.2.5 CHANNELRELAY (or CHANNELRELAYENABLE or CHANNELRELAYENABLED)

This macro enables or disables channel relays.

ENTRY FORMAT

```
CHANNELRELAY [ "ON / OFF" ]
```

VARIABLES

- ON = enable channel relays.
- OFF = disable channel relays.

EXAMPLE 1

```
CHANNELRELAY ON
```

A.2.6 CLEARSYNC (or CLEARAUX)

This macro enables or disables channel relays.

ENTRY FORMAT

```
CLEARSYNC
```

VARIABLES

None.

EXAMPLE 1

```
CLEARSYNC
```

A.2.7 CLOSURE (or TRIGGER)

This macro simulates the sending of a virtual closure from a device that supports closures to the Audio Server. For example, if you have a satellite receiver on closure 5, you can issue this macro to mimic the sending of a virtual closure from that receiver to the Audio Server. This macro often is used for troubleshooting. For ease of use, you might want to map this macro to a Hot Key.

ENTRY FORMAT

```
CLOSURE [NAME], #
```

VARIABLES

- NAME = name of the device, as configured in the Audio Server.
- # = number of the closure.

EXAMPLE 1

```
CLOSURE BTACS82, 1
```

A.2.8 COMMENT (or THECOMMENT)

This macro allows you to add comments to your run log. The cue type of comment macro events can be used to affect playback of your program log. Common examples are:

- Stopping playback and making it obvious why.
- Creating a `COMMENT` macro similar to Example 1 below with a Manual Start (aka Stop) cue type. You can mark your top of the hour with a comment by creating a `COMMENT` macro similar to Example 2, with a cue type of Time Immediate or Time Next.

These are but a few of the many functions you can perform using the `COMMENT` macro.

ENTRY FORMAT

`COMMENT [THECOMMENT]`

VARIABLES

- `THECOMMENT` = comment text.

EXAMPLE 1

This example shows a comment about going live on the air using a manual cue type.

```
COMMENT Talent: Go live on the air!
```

EXAMPLE 2

This example shows a comment about a top-of-the-hour resync, with a Time Immediate or Time Next cue type.

```
COMMENT Top of the hour re-sync
```

A.2.9 COMMERCIALBREAKBEGIN (or BREAKBEGIN)

This macro signifies the start of a commercial break.

ENTRY FORMAT

```
COMMERCIALBREAKBEGIN [LENGTH], [ "MANDATORY/OPTIONAL" ], { "FADE" }, { FADE% }, { "PLAYIFEMPTY " },  
{NAMETOPLAY}
```

VARIABLES

- `LENGTH` = length in mm:ss format.
- `MANDATORY` = the break must be filled with content. The system fills the break automatically to the allotted time, even if there is no content.
- `OPTIONAL` = the system skips the break automatically if empty.
- `FADE` = uses the fade percentage specified.
- `FADE%` = if `FADE` is included, sets the volume of the “rejoin liner” (typically, a 10-second blurb of audio that you hear after a commercial break before returning to a satellite broadcast). If `FADE` is omitted, this variable is ignored.
- `PLAYIFEMPTY` = plays an event if a break has no items.
- `NAMETOPLAY` = filename of item to play if empty.

EXAMPLE

```
COMMERCIALBREAKBEGIN 3:00, MANDATORY
```

A.2.10 COMMERCIALBREAKEND (or BREAKEND)

This macro signifies the end of the break period.

ENTRY FORMAT

```
COMMERCIALBREAKEND
```

VARIABLES

None.

EXAMPLE

```
COMMERCIALBREAKEND
```

A.2.11 CONSOLEOUT

This macro sends a command to an Axia console.

ENTRY FORMAT

```
CONSOLEOUT [NAME], [COMMAND]
```

VARIABLES

- NAME = name of the Axia console.
- COMMAND = command to be sent to the Axia console.

EXAMPLE

```
COMMERCIALBREAKEND
```

A.2.12 DECKTIMER

This macro superimposes a countdown timer over the top deck on the Studio Client Playback Deck Stack. This is useful to run during a live show to display to the on-air talent the amount of time remaining in a show segment, among other uses. When a new event starts, or when the time runs out, the superimposed countdown timer disappears.

In the following figure, the countdown timer created by the DECKTIMER macro appears over top of the top deck in the Studio Client's Playback Deck Stack.



Entry FORMAT

```
DECKTIMER [DESCRIPTION], [DURATION]
```

VARIABLES

- DESCRIPTION = description to display on the deck.
- DURATION = duration of the countdown timer, in mm:ss format.

EXAMPLE

```
DECKTIMER LIVE! - Dingo & The Baby Segment 1, 13:00
```

A.2.13 DEVICE

Use this macro to enable or disable the use of a hardware I/O device, such as a switcher or trigger/relay hardware.



Note: Use the exact name of the device you configured on the Device I/O page of your Audio Server module's configuration settings. If the name differs from the one specified in the macro or is misspelled, your macro will return an error when it executes.

ENTRY FORMAT

```
DEVICE [NAME], [ "ON" / "OFF" ]
```

VARIABLES

- NAME = name of the device.
- ON = turn on the device.
- OFF = turn off the device.

EXAMPLE 1

This example turns on the Broadcast Tools ACS 8.2 audio switcher/GPIO device, which is named "WBSIACS8.2" when it was configured. This device connects to the WBSI Audio Server. This example makes the device available to send audio channel switching commands, relay commands, and receive triggers from OpX One.

```
DEVICE WBSIACS8.2, ON
```

EXAMPLE 2

This example allows OpX One to disable communications with the ACS 8.2 from Example 1. As a result, triggers are no longer acknowledged, and switching and relay commands are not sent to the device.

```
DEVICE WBSIACS8.2, OFF
```

A.2.14 FADECURRENT (or FADECUR)

This macro fades out the currently playing items.

Entry FORMAT

```
FADECURRENT
```

VARIABLES

None.

EXAMPLE

```
FADECURRENT
```

A.2.15 FADEOUTLASTITEM (or FADE_OUT_LAST_ITEM)

This macro looks ahead from the current item for a @ time-immediate cue, and then backs up to find an audio item before the time-immediate event. It then sets the fade on that item, which will be the last audio item before the time-immediate.

Nothing happens when you run the macro. It merely sets the fade out on the last item before the time-immediate event. See the example below.

Entry FORMAT

```
FADEOUTLASTITEM [TIME], [LENGTH]
```

VARIABLES

- **TIME** = the time to start the fade in HH:MM:SS
- **LENGTH** = length of the fade, in milliseconds.

EXAMPLE

Assume that your log looks resembles the following:

```
+ 17:56:00 SONG  
+ 17:58:00 LAST  
@ 18:00:00 SATSHOW START, THESHOW
```

Macros

Also, assume that some time before the last item in the hour starts, the following macro is executed:

```
FADEOUTLASTITEM 17:59:55, 4000
```

This macro sets the fade to start at 17:59:55 over four seconds, giving a second of silence before the satellite show starts at 18:00:00.

You can run the macro in the log, for example, 15 minutes prior to the end of the hour.

A.2.16 FLUSHEVENTLOG (or FLUSHRUNLOG)

This macro flushes the run log.

Entry FORMAT

```
FLUSHEVENTLOG
```

VARIABLES

None.

EXAMPLE

```
FLUSHEVENTLOG
```

A.2.17 GETFILLFILES (or GETFILL)

This macro forces the File Server to scan the folders for your station that contain Fill material, and copy any new or modified files to the Audio Server's local folder.

Entry FORMAT

```
GETFILLFILES
```

VARIABLES

None.

EXAMPLE

```
GETFILLFILES
```

A.2.18 GETPROGRAMLOGS

This macro forces the File Server to scan the program log folder for your station, and copy any new or modified program logs to the Audio Server's local folder.

Entry FORMAT

```
GETPROGRAMLOGS
```

VARIABLES

None.

EXAMPLE

```
GETPROGRAMLOGS
```

A.2.19 GETVOICETRACKS

This macro forces the Audio Server to compare the specified hour of the currently loaded program log with the same hour in the File Server's copy of the program log, and update the on-air log with any new remotely created voicetracks.

Entry FORMAT

```
GETVOICETRACKS [HH]
```

VARIABLES

- HH = hour of voicetrack events update.

EXAMPLE

The following example updates the voicetrack files in the current on-air log for the 2:00pm hour with any newly created or modified remote voicetrack files currently on the File Server.

```
GETVOICETRACKS 14
```

A.2.20 LOADLOG

This macro loads a program log using the entry in the **Program Log Name Template** field of the **General** tab in the Audio Server configuration settings.

This macro always loads the log using the date of your workstation's system date. If this macro is run before noon of the current day the current day's log is loaded. If after noon, the next day's log is loaded. This means that if your system's date is Tuesday December 23, 2015 at 11:55:25 PM when the `LOADLOG` macro is run, the program log for Wednesday December 24, 2015 is loaded. No variables apply to this macro.

For options about loading specifically named program logs and additional options for reloading today's log using the Audio Server's Program Log Name Template settings, see the `LOADLOG` macro later in section A.2.20.

If `{NAME}` is omitted, the configured program template log is loaded.

Entry FORMAT

```
LOADLOG {NAME}
```

VARIABLES

- `NAME` = name of the log to be loaded.

EXAMPLE

```
LOADLOG
```

A.2.21 LOADLOGFROMSERVER

This macro loads a program log from the file server. If {NAME} is omitted, the configured program log template is loaded.

Entry FORMAT

```
LOADLOGFROMSERVER {NAME}
```

VARIABLES

- NAME = name of the log to be loaded.

EXAMPLE

```
LOADLOGFROMSERVER
```

A.2.22 LOADSCHED (or LOADSCHEDULED or LOADSCHEDULEDEVENTS)

This macro loads a Scheduled Event set.

Entry FORMAT

```
LOADSCHED {NAME}
```

VARIABLES

- NAME = name of the Scheduled Event Set to be loaded.

EXAMPLE

```
LOADSCHED BEACHSONGEVENTSET
```

A.2.23 LOADSCHEDULEDEVENTS (or LOADSCHEDULED)

The OpX One Audio Server can use only one Scheduled Events set at a time. Using this macro, however, makes it possible to switch between different Scheduled Events sets. Running this macro loads the named Scheduled Events set and unloads the previously loaded set. If the name of the Scheduled Events set is omitted, the Audio Server unloads any currently loaded scheduled events set.

Entry FORMAT

| |
|----------------------------|
| LOADSCHEDULEDEVENTS [NAME] |
|----------------------------|

VARIABLES

- NAME = name of Scheduled Events set.

EXAMPLE 1

The following example unloads the currently loaded Scheduled Events set, so the events in that set will no longer execute. The **BaseballSchedSet** loads and all events in that set execute at their configured times, as long as the Scheduled Events function is enabled (turned on).

| |
|--------------------------------------|
| LOADSCHEDULEDEVENTS BaseballSchedSet |
|--------------------------------------|

EXAMPLE 2

Since no scheduled events set name is specified, the Audio Server unloads any currently loaded scheduled events set. In this example, the alternate macro name `LOADSCHEDULED` is used instead of `LOADSCHEDULEDEVENTS`. The two macros are functionally equivalent. The only difference is that one macro name is longer than the other macro name.

| |
|---------------|
| LOADSCHEDULED |
|---------------|

A.2.24 LOADTRIGGERS

This macro loads a trigger set. You can run this macro from a scheduled event, the program log, a cart, or another trigger set.

Entry FORMAT

```
LOADTRIGGERS [NAME]
```

VARIABLES

- NAME = filename of the trigger set.

EXAMPLE 1

The following example loads a trigger set named **DavesTriggerSet**.

```
LOADTRIGGERS DavesTriggerSet
```

EXAMPLE 2

Since no trigger set is named, running this example unloads the currently loaded trigger set.

```
LOADTRIGGERS
```

A.2.25 MIXFADE

Use this macro to force one of the Audio Server's configured mixers to fade in, fade out, or fade to a specific level (for ducking or other purposes). You can use either the name you've given your mixer or the mixer's number. Volume is in percent, with 100% being fully open/up and 0% being fully closed/down.

Entry FORMAT

```
MIXFADE [NAME OR #],[START%],[STOP%],[TIME]
```

VARIABLES

- NAME OR # = mixer name or number,
- START% = start volume percentage.
- STOP% = stop volume percentage.
- TIME = duration, in milliseconds.

EXAMPLE

The following example fades the mixer named **SATELLITE** from an initial 0% to a final 100% over a length (or ramp time) of 2.5 seconds.

```
MIXFADE SATELLITE, 0, 100, 2500
```

A.2.26 MIXVOLUME

Use this macro to force one of the Audio Server's configured mixers to cut to a specific volume level instantly. Use either the name you've given your mixer or the mixer's number. Volume is specified as a percentage, with 100% being fully open/up and 0% being fully closed/down.

Entry FORMAT

```
MIXVOLUME [NAME OR #],[PERCENT]
```

VARIABLES

- NAME OR # = mixer name or number.
- PERCENT = volume percentage.

EXAMPLE

The following example set the volume of the first defined mixer to 100%.

```
MIXVOLUME 1, 100
```

A.2.27 MODE

This macro allows you to change the Audio Server's automation mode to Auto, Assist, or Manual mode.

Entry FORMAT

```
MODE [ "AUTO" / "ASSIST" / "MANUAL" ]
```

VARIABLES

- `AUTO` = change the Audio Server's automation mode to auto.
- `ASSIST` = change the Audio Server's automation mode to assist.
- `MANUAL` = change the Audio Server's automation mode to manual.

EXAMPLE 1

The following example sets change the Audio Server's automation mode to auto.

```
MODE auto
```

EXAMPLE 2

The following example sets change the Audio Server's automation mode to assist.

```
MODE assist
```

EXAMPLE 3

The following example sets change the Audio Server's automation mode to manual.

```
MODE manual
```

A.2.28 PADENABLE (or ENABLEPAD)

This macro enables or disables PAD output.

Entry FORMAT

```
PADENABLE [ "ON" / "OFF" ]
```

VARIABLES

- ON = enable PAD output.
- OFF = disable PAD output.

EXAMPLE

```
PADENABLE ON
```

A.2.29 PADOUT (or OUTPAD)

This macro outputs PAD from the specified parameters.

Entry FORMAT

```
PADOUT
```

VARIABLES

None.

EXAMPLE

```
PADOUT
```

A.2.30 PAUSE

This macro allows you to put a pause between events.

Entry FORMAT

```
PAUSE [LENGTH]
```

VARIABLES

- LENGTH = length of the pause, in mm:ss format.

EXAMPLE

The following example pauses playback of events for 10 seconds.

```
PAUSE :10
```

A.2.31 PLAYASYNC (or PLAYAUX)

This macro plays an audio file in the auxiliary playback deck. This is useful to play a background audio file at the same time audio is playing in the main playback decks, such as a backing track behind a weather forecast.

Entry FORMAT

```
PLAYASYNC [NAME]
```

VARIABLES

- NAME = filename of audio file to play without extension.

EXAMPLE

If the following macro is run from the program log followed by an audio file containing a dry reading of the weather, the audio file **weatherbed1.wav** executes on the Async deck, and then the weather would play immediately over top.

```
PLAYASYNC weatherbed1
```

A.2.32 PLAYTIMESHIFT (or PLAYTS or TIMESHIFT)

This macro plays a file in the timeshift deck. After using a clock from the Clock Builder to record a satellite show, this macro is added to a clock to play back the recorded audio. This macro prompts the OpX One system to start playback of your pre-recorded satellite show's audio file.

Entry FORMAT

| |
|----------------------|
| PLAYTIMESHIFT [NAME] |
|----------------------|

VARIABLES

- NAME = name of the audio file to play.

EXAMPLE

This example starts playback of the audio file **BILLOREALLYHR1.wav**. This file was created with the record function of the Clock Builder module.

| |
|------------------------------|
| PLAYTIMESHIFT BILLOREALLYHR1 |
|------------------------------|

A.2.33 RECORD

Use this macro to record audio using one of your Audio Server's record decks (for recording audio manually rather than using the record function of the Clock Builder).

Audio files can be recorded to a specified length by entering a [Length to record] variable with a specific time (such as 30:00). To record a variable-length audio file, specify the time as 00:00, and when you want to stop recording, run a second `RECORD STOP, [Deck #]` macro.

Time is interpreted as `mm:ss` if only five digits are entered (including the colon), or as `hh:mm:ss` if 8 digits are entered (including the two colons).

The `Filename`, `Title/Description`, and `Artist` variables you use can include meta variables for the date or time, as shown in the following table.

| Meta Variable | Description |
|---------------|---|
| %yy | Year as a 2-digit number (00-99) |
| %yyyy | Year as a 4-digit number (0000-9999) |
| %m | Month as a number without a leading zero (1-12) |
| %mm | Month as a number with a leading zero (01-12) |
| %mmm | Month as a 3-letter abbreviation (Jan-Dec) |
| %mmmm | Month as a full name (January-December) |
| %d | Day as a number without a leading zero (1-31) |
| %dd | Day as a number with a leading zero (01-31) |
| %ddd | Day as a 3-letter abbreviation (Mon-Sun) |
| %dddd | Day as a full name (Monday-Sunday) |

Entry FORMAT

```
RECORD ["START"/"STOP"], [DECK#], [NAME], [LENGTH], [TITLE],[Artist], [UPLOAD], [TRIM]
```

VARIABLES

- `START` = starts recording.
- `STOP` = stops recording.
- `DECK#` = number of the deck on which recording is to start or stop.
- `NAME` = filename to save to.
- `LENGTH` = length to record.

Macros

- `TITLE` = description.
- `ARTIST` = name of the artist.
- `UPLOAD` = copies a file from the Audio Server to the File Server.
- `TRIM` = removes the silence (“dead air”) from the start or end of the specified file.

EXAMPLE 1

This example records an audio file that will be 5 minutes long from Record Deck 1. The file will be saved with the file name **NEWS.wav** (or other extension for other file types), with the audio file's Title field showing **ABG News** and the artist field showing **Doug Haiku**.

```
RECORD START, 1, NEWS, 05:00, ABG News, Doug Haiku
```

EXAMPLE 2

This example records an audio file of variable length that must be stopped at some point with the `RECORD STOP, 2` macro or it will eventually fill up the hard drive. The file is played from Record Deck 2 with the file name **Rosh-122315.wav** (if the file were recorded on December 23, 2015) and the audio file's Title/Description field would show **Rosh Limberg Show – 12/23/2008**.

```
RECORD START, 2, Rosh-%mm%dd%yy, 00:00, Rosh Limberg Show - %mm/%dd/%yyyy
```

EXAMPLE 3

This example stops Record Deck 2 from recording and save its audio file to the File Server.

```
RECORD STOP, 2
```

A.2.34 RELAY

This macro forces a relay closure open (on), closed (off), or to pulse closed for a period of milliseconds.

Entry FORMAT

| |
|--|
| RELAY [NAME], [#], ["ON" / "OFF" / MS] |
|--|

VARIABLES

- NAME = name of the device.
- # = relay number.
- ON = relay is turned on.
- OFF = relay is turned off.
- MS = milliseconds.

EXAMPLE

This example pulses for 500 milliseconds the first relay on the device named **ACS8.2** configured in the Audio Server's Device I/O settings.

| |
|----------------------|
| RELAY ACS8.2, 1, 500 |
|----------------------|

A.2.35 RESETCART

This macro resets a cart's "event executed" flags, so that all items within a cart are marked as unplayed. The next time the cart is played, the first item is played (or in randomized carts, all items within the cart will be available to play again).

Entry FORMAT

```
RESETCART [NAME]
```

VARIABLES

- NAME = name of the cart to reset.

EXAMPLE

This example causes the cart named **STATIONIDCART** to remove the internal event executed flags from each event in the cart, so that the next time that cart executes, it starts playing from the first event in the cart.

```
RESETCART STATIONIDCART
```

A.2.36 RUN (or START)

This macro starts the next item regardless of cue.

Entry FORMAT

```
RUN
```

VARIABLES

None.

EXAMPLE

```
RUN
```

A.2.37 RUNAPPLICATION

OpX One can execute any application that can be executed using the Microsoft Windows Command Prompt. This allows you to have OpX One start any custom application you might need.

This macro allows you to enter the path to an executable file on your Audio Server machine, including any parameters required by that executable file, as the macro's variable.

Entry FORMAT

```
RUNAPPLICATION [PATH]
```

VARIABLES

- PATH = full path and parameters for executable file.

EXAMPLE

This example tells Windows to execute the command `C:\Program Files\My Apps\CustomApp.exe /x`, which starts the `CustomApp.exe` executable and passes it the parameter `/x`.

```
RUNAPPLICATION C:\Program Files\My Apps\CustomApp.exe /x
```

A.2.38 SAVEPROGRAMLOG

This macro saves the program log.

Entry FORMAT

```
SAVEPROGRAMLOG
```

VARIABLES

None

EXAMPLE

```
SAVEPROGRAMLOG
```

A.2.39 SATSHOW

This macro is usually generated by the Clock Builder module to start a satellite show. However, it is possible to manually use this macro. If placed in a Hot Key, you can restart a satellite show if necessary.

Entry FORMAT

| |
|--|
| SATSHOW ["START" / "STOP" / "STOPLIVE" / "STOPRECORD"], [NAME] |
|--|

VARIABLES

- START = start the satellite show.
- STOP = stop the satellite show.
- STOPLIVE = stop live satellite show.
- STOPRECORD = search the list of active satellite shows and stop the ones that are recording.
- NAME = name of the satellite show.

EXAMPLE

This macro puts all the settings configured in the Clock Builder for the Satellite Show Start event titled **BILL OREALLY**.

| |
|-----------------------------|
| SATSHOW START, BILL OREALLY |
|-----------------------------|

A.2.40 SATSHOWTIMER

This macro shows a sat show count-up in the playback deck.

Entry FORMAT

```
SATSHOWTIMER ["START" / "STOP"], [NAME], [DESCRIPTION]
```

VARIABLES

- `START` = start the satellite show count-up in the playback deck.
- `STOP` = stop the satellite show count-up in the playback deck.
- `NAME` = name of the satellite show count-up in the playback deck.
- `DESCRIPTION` = description of the satellite show count-up in the playback deck.

EXAMPLE

This macro puts all the settings configured in the Clock Builder for the Satellite Show Start event titled **BILL OREALLY**.

```
SATSHOWTIMER START, BILL OREALLY
```

A.2.41 SCHED (or SCHEDULED)

This macro enables or disables the execution of scheduled events loaded in the Audio Server.

Entry FORMAT

| |
|------------------------|
| SCHED ["ON" / "OFF"] |
|------------------------|

VARIABLES

- ON = enable execution.
- OFF = disable execution.

EXAMPLE

| |
|----------|
| SCHED ON |
|----------|

SEE ALSO

LOADSCHED (or LOADSCHEDULED or LOADSCHEDULEDEVENTS) on page 348.

A.2.42 SCHEDULEDEVENTS (or SCHEDULED)

This macro turns the scheduled events function on or off.

Entry FORMAT

```
SCHEDULEDEVENTS [ "ON" / "OFF" ]
```

VARIABLES

- ON = enable the scheduled events function.
- OFF = disable the scheduled events function.

EXAMPLE 1

This macro turns on the Scheduled Events function, so that the events in the currently loaded Scheduled Events set executes its events at the specified times.

```
SCHEDULEDEVENTS ON
```

EXAMPLE 2

This macro turns off the Scheduled Events function, so if events in the currently loaded Scheduled Events set are set to execute at a specific time, they are ignored. In the following example, the command `SCHEDULED` is used instead of `SCHEDULEDEVENTS`. The two macros are functionally equivalent. The only difference is that one macro name is longer than the other macro name.

```
SCHEDULED OFF
```

A.2.43 SENDPAD (or PADSEND)

This macro outputs PAD from a file name.

Entry FORMAT

```
SENDPAD
```

VARIABLES

None.

EXAMPLE

```
SENDPAD
```

A.2.44 SERIALOUT

This macro sends a serial string out the serial port of any configured serial device.

Entry FORMAT

```
SERIALOUT [NAME], [COMMAND]
```

VARIABLES

- NAME = name of the device.
- COMMAND = serial string.

EXAMPLE

This macro sends the serial string ***1051** out the serial port or serial server to which the device named **ACS82** on the Audio Server is connected. This serial string is commonly used to switch most Broadcast Tools switchers, such as the ACS 8.2 and others, to set Output 1 to open Input 5.

```
SERIALOUT ACS82, *1051
```

A.2.45 START

This macro starts playback of the next event in your program log. If audio is already playing, this macro starts the next event playing at the same time, without cutting off the currently playing event. For a macro that stops the currently playing event and start the next event, see the `STARTNEXT` macro in section A.2.48.

Entry FORMAT

```
START
```

VARIABLES

None.

EXAMPLE

```
START
```

A.2.46 STARTDECK

This macro starts the specified deck.

Entry FORMAT

```
STARTDECK [DECK#]
```

VARIABLES

- `DECK#` = number of the deck to be started.

EXAMPLE

This example starts deck number 2.

```
STARTDECK 2
```

A.2.47 STARTENABLE

This macro enables or disables the start command. Use this macro when your programming is automated and you want to prevent manual intervention.

Entry FORMAT

```
STARTENABLE [ "ON" / "OFF" ]
```

VARIABLES

- ON = enable the start command.
- OFF = disable the start command.

EXAMPLE

```
STARTENABLE ON
```

A.2.48 STARTNEXT

This macro is similar to the `START` macro, but changes its behavior based on the state of the Playback Deck Stack:

- If an event is playing when this macro executes, it fades out and the next event in the program log executes.
- If no event is playing in the Playback Deck Stack, the item loaded in the top of the Playback Deck Stack executes.

Entry FORMAT

```
STARTNEXT
```

VARIABLES

None.

EXAMPLE

```
STARTNEXT
```

A.2.49 STEPTHROUGH

The Step-Through function of the Audio Server determines how timed events (events with a Time Immediate or Time Next cue type) start. This macro allows you to turn the Step-Through function on or off.

- If the Step-Through function is enabled, timed events start when their time is reached. If a particular timed event is reached before its scheduled time, that event starts automatically, as if it were an Auto Start cued event. This is useful for “Music-from-Hard-Drive” stations that encounter missing audio files and want their timed events to run early rather than having dead air until a timed event’s time is reached.
- If the Step-Through function is disabled, timed events do not execute until their specified time is reached. This is the standard setting for OpX One, since it is the expected behavior of timed events for most users.

Entry FORMAT

```
STEPTHROUGH [ "ON" / "OFF" ]
```

VARIABLES

ON = enable stepthrough.

OFF = disable stepthrough.

EXAMPLE 1

```
STEPTHROUGH ON
```

EXAMPLE 2

```
STEPTHROUGH OFF
```

A.2.50 STOP

This macro stops playback of all events being played by the Playback Deck Stack. This macro is most commonly used with the trigger set function to allow you to configure stop buttons on consoles.

Entry FORMAT

```
STOP
```

VARIABLES

None.

EXAMPLE

```
STOP
```

A.2.51 STOPDECK

This macro stops the specified deck.

Entry FORMAT

```
STOPDECK [DECK#]
```

VARIABLES

- DECK# = number of the deck to be stopped.

EXAMPLE

This example stops deck number 2.

```
STOPDECK 2
```

A.2.52 SYNCRECORDSFOLDER (or SYNCRECORDS)

This macro forces the File Server and Audio Server to synchronize the `Records` folder for your station. It copies any new or modified files between the Audio Server's local folder and the File Server's `Records` folder, so both have the most recent versions of all files. You can use this macro to ensure that all files in the Audio Server's local folder are up to date.

Entry FORMAT

| |
|-------------------|
| SYNCRECORDSFOLDER |
|-------------------|

VARIABLES

None.

EXAMPLE

| |
|-------------------|
| SYNCRECORDSFOLDER |
|-------------------|

A.2.53 SYNCRUNLOGSFOLDER (or SYNCRUNLOGS)

This macro forces the File Server and Audio Server to synchronize the `Runlogs` folder for your station. It copies any new or modified files between the Audio Server's local folder and the File Server's `Runlogs` folder, so both have the most recent versions of all files.

ENTRY FORMAT

| |
|-------------------|
| SYNCRECORDSFOLDER |
|-------------------|

VARIABLES

None.

EXAMPLE

| |
|-------------------|
| SYNCRECORDSFOLDER |
|-------------------|

A.2.54 TCPOUT (or UDPOUT, IPOUT, or IPSEND)

This macro sends commands to a TCP/UDP device.

ENTRY FORMAT

| |
|--------------------------|
| TCPOUT [NAME], [COMMAND] |
|--------------------------|

VARIABLES

- NAME = name of the device.
- COMMAND = command to be sent to the device.

EXAMPLE

| |
|-------------------|
| SYNCRECORDSFOLDER |
|-------------------|

A.2.55 TIMEDBLOCKSTART

This macro is used with the `TIMEDBLOCKEND` macro to specify the length of a block of audio, such as a break, and have OpX One “stretch” (slow down) or “squeeze” (speed up) the audio so that the audio fits the specified block length.

ENTRY FORMAT

| |
|---------------------------------------|
| <code>TIMEDBLOCKSTART [LENGTH]</code> |
|---------------------------------------|

VARIABLES

- `LENGTH` = length of block, in hh:mm:ss format.

EXAMPLE

This example adds to the start of a break which the operators wants to be stretched or squeezed automatically to be a total of 3:00 minutes long. When using this macro, add the `TIMEDBLOCKEND` macro after the block of audio. The pair of these macros is the way OpX One ascertains which audio files are to be stretched or squeezed. Without the `TIMEDBLOCKEND` macro at the end of your block of audio files, OpX One would not know the end point of your block of audio and cannot fit your audio properly to the specified length.

| |
|------------------------------------|
| <code>TIMEDBLOCKSTART 03:00</code> |
|------------------------------------|



Note: Do not use carts and timed events (events with a Time Immediate or Time Next cue type) within the `TIMEDBLOCKSTART` / `TIMEDBLOCKEND` macro pair. This is because the length of audio events within carts cannot be determined until the cart itself starts to play, and timed events affect the start point of playback (either stopping playback or starting early if their specified time is reached), Both of these actions are beyond the control of this macro.

A.2.56 TIMEDBLOCKEND

This macro is used with the `TIMEBLOCKSTART` macro to specify the length of a block of audio files, so that OpX One can time scale the block of audio automatically to your desired length. The `TIMEDBLOCKEND` macro is added to the end of your block of audio (with the block started with the `TIMEDBLOCKSTART` macro), which is to be time-scaled.

Entry FORMAT

| |
|---------------------------|
| <code>TIMEBLOCKEND</code> |
|---------------------------|

VARIABLES

None.

EXAMPLE

| |
|---------------------------|
| <code>TIMEBLOCKEND</code> |
|---------------------------|

A.2.57 TIMEEVENTS (or TIMEDEVENTS)

This macro changes the Time Events mode on the Audio Server to change OpX One's behavior when playing time cued events in the Program Log and when executing events from your current Scheduled Events set.

Entry FORMAT

```
TIMEEVENTS [ "ON" / "OFF" / "ALL"
```

VARIABLES

- ON = turn on time events.
- OFF = turn off time events.
- ALL = turn on stepthrough.

EXAMPLE 1

```
TIMEEVENTS ON
```

EXAMPLE 2

```
TIMEEVENTS OFF
```

EXAMPLE 3

```
TIMEEVENTS ALL
```

A.2.58 TIMESCALEITEM (or SCALEITEM or TSITEM)

This macro sets the time scaling for the specified program log item. For example, if you have an infomercial that is 14:45 long, but must fit into a 15-minute timeframe, you can use this macro to stretch the infomercial so it fills the 15-minute spot. Similarly, you can use this macro to squeeze content that exceeds the time in which it is scheduled to play.

Entry FORMAT

```
TIMESCALEITEM ["NEXT" / +#, #]
```

VARIABLES

- NEXT = next program log item.
- +# = number of item forward from current position.
- # = absolute log position.

EXAMPLE

This example sets the time scaling for 5 items forward.

```
TIMESCALEITEM +5
```

A.2.59 TRIGGERS

This macro enables or disables the trigger functionality of the Audio Server.

- If triggers are turned on, all incoming triggers execute the events from your currently loaded Trigger Set.
- If triggers are turned off, all incoming triggers are ignored.

Entry FORMAT

```
TRIGGERS [ "ON" / "OFF" ]
```

VARIABLES

- ON = turn on triggers.
- OFF = turn off triggers.

EXAMPLE 1

This example turns on triggers.

```
TRIGGERS ON
```

EXAMPLE 2

This example turns off triggers.

```
TRIGGERS OFF
```

A.2.60 TRIM

This macro trims silence from the specified file.

Entry FORMAT

```
TRIGGERS [NAME]
```

VARIABLES

- NAME = name of the file.

EXAMPLE

```
TRIM 50954
```

Appendix B - Cue Types

This appendix describes the cue types supported by OpX One event playback. Cue types determine how events are started in the program log or from within carts.


- With program logs, every event is started by a scheduled time (such as with Time Immediate cued events) or from the interaction of previous items playing back. Examples of the latter include Auto Start cued events, which start when the previous event finishes, and Stop cued events, which stop playback after the previous event finishes.
- Carts use the Stop cue and Auto Start cue to determine how many events are played from a cart. When a Stop cued event is reached during cart play, the cart quits. If the cart is being played from a program log, the next event in the program log executes with respect to its specified cue type.

| Cue Type | Description |
|--------------------|--|
| Stop (blank) | Event will not start playing when the previous item finishes. |
| Auto Start (+) | Event starts playing automatically when the previous item finishes |
| Time Immediate (@) | <p>If playback has not reached the event at the time set in the Scheduled Time field:</p> <ul style="list-style-type: none"> • The currently playing event(s) stops. • All events in the program log between the currently playing event and the Time Immediate event are skipped. • The Time Immediate event plays. Playback continues from this point forward and all previous events are skipped. <p>If playback reached the event at the time specified in the Scheduled Time field, playback stops until the specified scheduled time, at which time it starts playing the Time Immediate event.</p> |
| Time Next (#) | <p>The behavior of the Time Next cue type is almost identical to the Time Immediate cue type. The difference is in when the Time Next event executes. While the Time Immediate event cuts off any playing events and starts playing, a Time Next event waits for the currently playing event to finish before executing.</p> <p>The trade-off is that the Time Next event might be delayed by the end of the previous event, while the Time Immediate event will play at exactly the time specified in the Scheduled Time field. For most 'music-from-hard-drive' stations, close to the top-of-the-hour is satisfactory for station IDs, so a song is not cut off, which would offend the listening audience.</p> |



Appendix C - Glossary

| Term | Definition |
|-----------------------|---|
| Audio pass-through | The ability of an audio device to route the audio coming through the line-in directly to the line-out, usually with the ability to control the volume of that audio from 0% (not passing through) to 100% (fully passed-through). This function is used for spot replacement when broadcasting syndicated satellite shows. |
| Cart | In OpX One, a cart is a special file created by the Log Import/ Cart Builder program that contains references to other files. Think of it as a mini program log. It can contain audio cuts to rotate or a list of macros to execute. OpX One treats carts just like an audio cut, but the cart itself can contain a set of audio files/commands to execute (playing multiple audio files/commands when the cart is 'played'), or a rotation of audio files (playing a different audio file/command each time the cart is 'played'). |
| Categories | OpX One can visually differentiate different types of audio files in the OpX One Studio Client. It does this according to which category each audio cut is assigned to. The category attribute is stored in the tagging information of each audio file. |
| Closures | Momentary contacts from an external source received through a device and relayed to an OpX One Audio Server. Closures are also known as outgoing triggers, or relays. |
| Database | The internal database OpX One keeps of all audio files and carts in your OpX One system. The database exists on the OpX One File Server. |
| De-bouncing | A function that allows a trigger system to ignore triggers for a specified amount of time after a trigger has been received. This helps combat accidentally repeated triggers from a satellite syndicator, sloppy relays in a satellite receiver, or if wired to a console switch, accidentally pressing a button multiple times. |
| Default ducking level | The OpX One Audio Server reduces the volume level of audio cuts playing underneath voice tracks by this amount unless a different amount is specified when a voice track is recorded. |
| Default segue time | If no segue time is specified in a certain audio cut, OpX One uses the default segue time to determine when to segue into the next audio cut following it in the program log. The default value is 250 milliseconds or ¼ second. |
| Device | A piece of equipment that communicates with an OpX One Audio Server to facilitate communication with external equipment or switch audio, such as a BSI Trigger Kit, Broadcast Tools audio switcher or an Axia node. |
| Device I/O | A setting in the OpX One Audio Server module that allows the module to interface with external devices such as BSI Trigger Kits, Broadcast Tools switchers, and Axia nodes. |
| FTP | File Transfer Protocol. A standard "language" for communicating data/files across a network. It is also the means by which audio files and carts are transferred from one OpX One module to another. |
| Macro | A command issued to the OpX One Audio Server as a string of text or text and numbers to perform various functions. |
| Maximum fade out | A user-selectable option on each Audio Server that allows you to set a maximum amount of time OpX One will fade each audio cut during playback. This is useful for song libraries where you want each song to fade over a certain period of time after the segue point of each song is reached. The default is 3,000 milliseconds or 3 seconds. |

| Term | Definition |
|------------------|--|
| Mixers | Each OpX One Audio Server can control the audio levels of some audio devices such as audio pass-through in sound cards and Axia nodes. The level controls of each audio device are accessed through the mixers command. |
| Mode | Designates how each OpX One Audio Server advances through a program log. There are two modes for each Audio Server – auto and manual. In auto mode, the audio server advances through the log automatically unless it encounters a command in a log directing it to do otherwise. In manual mode, the audio server steps through the log manually, relying on outside input before advancing |
| Network | A system of communication between 2 or more computers. This is also referred to as a LAN, or local area network. Some in the radio/broadcasting industry use the term “network” interchangeably to mean either a satellite show, or a computer network. This manual uses it to mean a computer network. |
| NIC | Network Interface Card. An expansion board you insert into a computer to connect to a network. |
| PAD | Program Associated Data. Each OpX One Audio Server is capable of sending PAD data via UDP to a single device such as an HD Radio importer, streaming audio encoder or RDS encoder. PAD data is useful for providing artist / title information, commercial substitution, etc. |
| Playback device | An audio device in or connected to your OpX One system for audio playback. For example: This could be an audio card, an individual channel of a multi- channel audio card, or individual output of an Axia node. |
| Record deck | A device that allows background recording of any type of audio. Recording is a function of the OpX One Audio Server, with up to 4 simultaneous background records possible. |
| Satellite show | A function of the OpX One Clock Builder – a simple, Q&A method of building clocks for syndicated programming. This is the same as what some refer to as a “network” show. The term “satellite show” is used to differentiate between it and a computer data network. |
| Sample rate | The number of samples taken of an audio source per second in digitally recorded audio. By default, OpX One operates at a sample rate of 44,100 Hz. |
| Scheduled events | Events programmed to execute in the background on an OpX One Audio Server, independent of the program log. Scheduled events are most commonly used for utility tasks or “set-it-and-forge- it” tasks. |
| Segue | A general term used to indicate the transition between two audio cuts. For example: This can be a “cold” transition, where one audio cut stops and the next one starts, or a cross-fade between two cuts. |
| Step through | A preference setting that, when enabled, causes timed events to automatically start if they are reached in the program log before their specified time effectively treats timed events as an “Auto Start” cued event. Disabling this setting (which is the default setting) causes playback of the program log to wait to play an item until its specified time. Typically used for non-music live, voicetracked or satellite programming. |
| System tray | Area in the Windows desktop that contains the system clock and status icons of many applications. The system tray usually appears the right side section of the Taskbar, which also contains the “Start” button. For example:  |
| Time shift | Recording a satellite show for playback at a later time, complete with triggers. These are played back through a special deck in the OpX One Audio Server. |
| Triggers | Also known as closures, they are signals typically from a satellite receiver relay closure or start/stop buttons on a console that OpX One receives through a “trigger kit” device and uses to play audio files or perform commands. |

| Term | Definition |
|-------------|--|
| Trigger set | A collection of commands or audio files that OpX One executes when specific closures are received. Each trigger set is individually named and can be loaded into the OpX One Audio Server at any time. |
| Time events | Audio or Macro events scheduled to execute at a specific time. For example, a timed event is used to ensure that your top of the hour ID will play exactly at the top of the hour. |
| Verify | A command in the OpX One Studio Client that checks to see whether the files specified in the currently loaded program log are available to play. This process also verifies that the artist, title, and description information listed in the program log matches the data imbedded within each specified audio cut. |
| Voicetrack | An audio file recorded in OpX One Studio Client to be inserted between two audio cuts and simulate live air talent. A voice track is a pre-recorded voice-over. |



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