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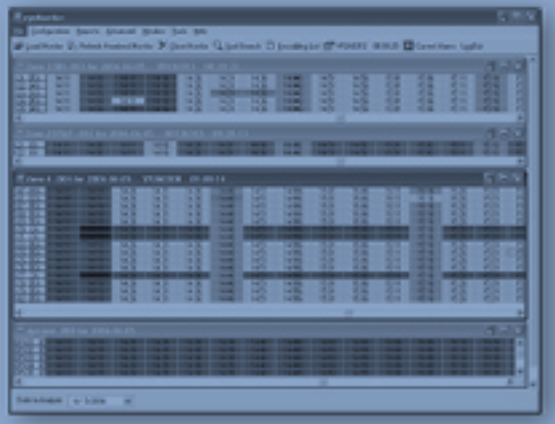
- Using autoDialer
- Creating Reports

eyeMonitor™

Enterprise Ad Insertion Monitoring

Operations Manual



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Chapter 1 - Introduction

Overview

The Adtec eyeMonitor software provides real-time, enterprise-wide system monitoring of commercial ad insertion. Ease of use and convenient single screen monitoring makes eyeMonitor the ideal choice for monitoring multiple headends and channels. Features include a graphical status of all headends and channels with detailed analysis and reporting just a click away. Prioritized alarms and comprehensive reporting streamlines trouble shooting and daily operation data. With convenient single-screen exception monitoring, eyeMonitor allows you to keep an eye on the entire enterprise locally or remotely.

Applications

- **Cable Ad Insertion:** Monitor all your ad insertion channels and headends from one screen with highlighted status of all scheduled events.
- **Broadcast Ad Insertion:** Provide master control with the status of all ad insertion with the ability to make last minute schedule changes.
- **Digital Ad Insertion:** Use eyeMonitor with any mix of Duet and DPI ad insertion channels for an integrated view of all analog and digital networks.

Benefits

- **Enterprise Monitoring:** eyeMonitor provides a bird's eye view of all ad insertion channels within multiple headends giving you critical status at a glance.

- **Detailed Reports:** Whether you are troubleshooting or tracking your daily activity, eyeMonitor provides on-screen and print reporting of discrepancies, missing media, daily verifications and ad insertion schedule confirmation.

- **One-Click Analysis:** Click on any scheduled avail to view the details and verification results, including the actual daily verification file.

- **Real Time Functionality:** eyeMonitor provides visible real-time status and highlights exceptions so that corrections can be made quickly and easily.

- **Catch Missing Media:** Each headend in eyeMonitor features a count down timer that displays how much time is left before missing material is needed for air.

Availability

eyeMonitor is provided as an available option to the Adtec Traffic Billing and Gateway Server (TBGS). The eyeMonitor software comes with a site license that can be installed on any network connected computer in the enterprise.

Requirements

This documentation reflects functionality of eyeMonitor version 2-3-21. Use of this software requires the following:

- LAN connectivity to the Adtec Traffic and Billing Gateway Server with adManage.
- Windows 2000 or XP: Intel or AMD 32 bit processor at 1 GHz; 512MB memory; 1024x768 32 Bit color capable graphics card.

Options

Option	Description
TBGS - 1RU	• 400 Watt power supply • Two Hot Swap SATA hard drives • Software RAID 1 (Mirroring) > 160 GB storage capacity • Dual Gigabit Ethernet NICs • Pentium 4 Intel Server mother board • Intel remote Server management • Windows 2000 Server • IIS FTP Server • mySQL Database • Adtec adManage application • Physical 19” x 1.7” x 25.7” 30 Lbs.
TBGS - 2RU	• Dual 550 Watt Hot Swap power supplies • Four Hot Swap SATA hard drives • Hardware RAID 5 > 400 GB storage capacity (1.5 TB max) • Dual Gigabit Ethernet NICs • Pentium 4 Intel Server mother board with 1GB RAM. • Intel remote Server management • Windows 2000 Server • IIS FTP Server • mySQL Database • Adtec adManage application • Physical 19” x 3.4” x 25.7” 35 Lbs.
adManage	The adManage traffic and media management application is at the core of the Adtec enterprise management of commercial insertion systems. The application is optionally available to support Interconnects and provides schedule merging, verification splitting and detailed real time network analysis and alarms. The web based interface of adManage is ideal for local or remote access via any web browser. The SQL database provides rock solid stability and rapid access to real time system data. A full complement of user definable alarms provides notification via e-mail, text messaging, paging as well as visual alarming via the browser.
autoDialer	The autoDialer application provides redundancy for LAN or WAN schedule distribution, verification and log file retrieval from the headends and central office. It can also be used with disconnected headends to manage schedules and verifications.

Chapter 2 - Getting Started

General Instructions

Before installing the eyeMonitor software, make sure that the TBGS is up and running and that you have completed user configuration within the adManage application, the content management software used with your TBGS. The usernames, passwords and user levels assigned in adManage have the same status in eyeMonitor. Please refer to the adManage documentation for adding and managing users.

Installer Instructions

Client PC Installation

To install eyeMonitor on a client Windows PC (not the TBGS) you will need to be on the same LAN/WAN as the TBGS and will need to map a network drive to the TBGS data folder before installing the software.

To map a network drive:

1. Right click Start > Explore.

2. Enter \\IPA in the address field where IPA is the IP address of the TBGS server. (Use the format XXX.XXX.XXX.XXX.)

3. Right click on the shared TBGS folder on the server and select "Map Network Drive" from the drop down menu.

4. Enter a Drive letter. Use one that is available (typically Z:\) and select "Reconnect at logon".

You may now run the eyeMonitor software installer. The instructions for Installing the software on a Client PC or the TBGS are the same.

Installation Options

Insert the eyeMonitor Software CD into your CD Drive. When the installer launches, you will need to select one of the following four options for installation. (Figure 2.1)

No Questions Asked Installation - This option recommended will install eyeMonitor using default settings.

More Information - Provides you with release notes for the current version and the ability to print them.

Select Components and Install - You may select which components of the product you wish to install. You can run this option after an installation has completed to add or remove components.

Advanced Options Installation - Allows you to designate specific folders for the Program Files, Common Files and Start Menu items.

Do Not Install - Closes the install application.

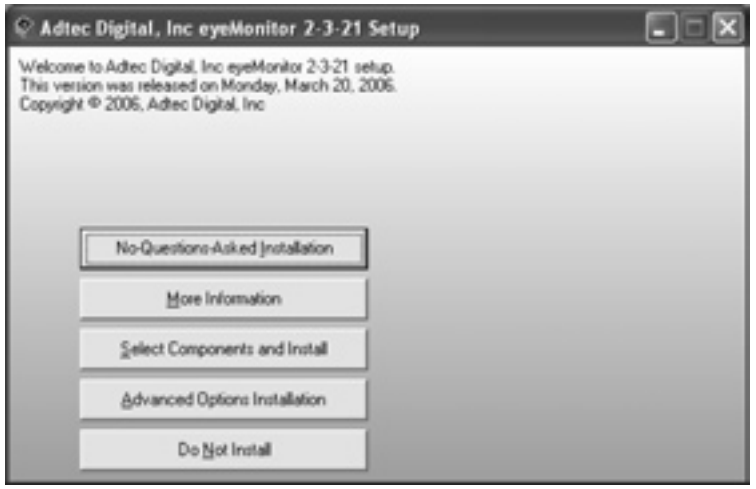


Figure 2.1

Once you have completed the installation process, you will need launch eyeMonitor and set several configuration values.

Initial Setup

Launch eyeMonitor by double-clicking the icon on the desktop or browse to Start > All Programs > Adtec > eyeMonitor. You will be prompted to complete the Initial Setup. See Figure 2.2.

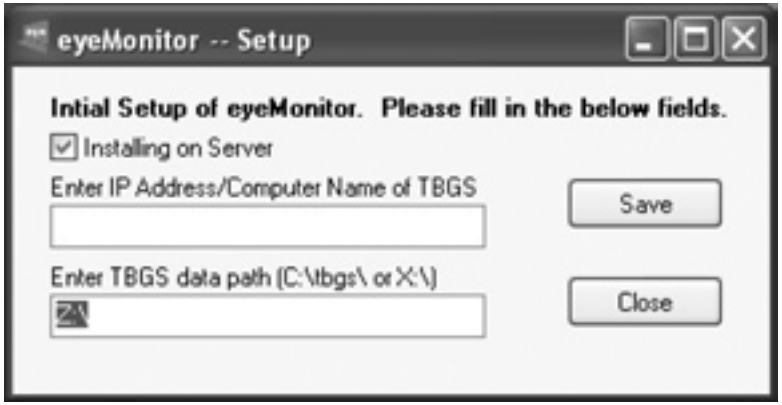


Figure 2.2

TBGS

If you installed eyeMonitor on the TBGS, you will need to check the box at the top of the initial screen "Installing on Server". This will fill the input boxes with the default Computer Name and Default Path. Click on the Save button to save these settings.

Client PC

If you installed eyeMonitor on a Client PC, you will need to make sure that the checkbox is not checked and then enter the correct information for the IPA/Computer Name and the Data Path. Click on the Save button to save these settings.

Notes: Use the format XXX.XXX.XXX.XXX when entering the IP Address. If completing initial setup on a Client PC, the Data Path is the network drive which you mapped prior to installation.

You will receive a message stating that you need to restart eyeMonitor to verify your host settings. Click "OK" and then the "Close" button on the Initial Setup screen. Relaunch eyeMonitor and you will be asked to login using your username and password. (Figure 2.3)

Figure 2.3

Users

The username and passwords selected for adManage are the same username and passwords to be used for eyeMonitor. You will see that the options for username are generated from adManage and placed in a drop down box for you to select from. As with adManage, there are three levels of access. Below are the permissions granted to each level.

Administrator - Administrators have full access to all functions and configuration variables within eyeMonitor.
Standard - Standard users may make break modifications and replace spots but cannot make configuration changes.
Guest - Guest users have read-only access.

Logging In and Out

If this is your first time logging in, you will notice that eyeMonitor automatically loads all available headends. These headends have been configured and are maintained through adManage. You can select which headends you want to monitor within eyeMonitor. Logging out can be accomplished by clicking on the Log Out button at the top of the monitor or selecting Log Out from the File menu.

In the next section you will be able to set the specifics of how your headend monitor displays data as well as the type of data to display. An overall view of a typical set up would look like the example on the following page, (Figure 2.4). Familiarize yourself with the terms used to describe the screen components as they will be used throughout this document. It is best to login with your assigned username and password. This will allow you to view "My Current Alarms".

Note: When viewing the current day, each channel will center align to the current event. You have the ability to view previous and forward for the schedule day.

Quick Button Bar:
Convienent button bar for the most common actions. Load, Refresh and Close Monitor; Spot Search, Encoding List, Priority Alarm, Current Alarms and LogOut.

Missing Media Countdown: This section of the Quick Button Bar displays how much time you have left before a missing spot is needed for air in the whole enterprise.

Run Rate Percentage:
This percentage rate reflects the percentage of events run without error.

Channels:
Channels may be listed horizontally or vertically. Each channel name is pulled from adManage (channel description)

Headend / Zone:
Each headend / zone has it's own window. The headend /zone name is located at the top

Date to Analyze: Drop down section of the date to analyze. Once you change the date, you will need to Close the Monitor and then Load it again to effect a change of date.

Headend Missing Media Countdown:
This section of the headend title bar displays how much time you have left before missing spot is needed for air in the headend.

Figure 2.4

Chapter 3 - Configuring eyeMonitor

You will need administrator access to make changes to the configuration setting of eyeMonitor.

Customizing Your Content

Headend Configuration:

To configure your content, begin with selecting the headends you wish to view. From the Configuration Menu, select Headend Configuration (Figure 3.1) The Headend Monitor Configuration panel allows you to set up the headends you would like to display within the monitor. The default settings are for all headends/zones to be displayed.

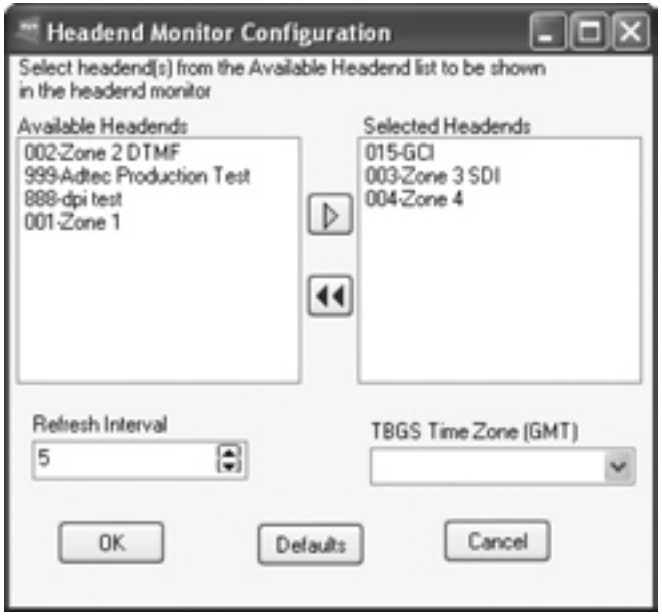


Figure 3.1

Available and Selected Headends:

A two panel configuration screen shows "Available Headends" on the left and "Selected Headends" on the right. To customize your headend view, choose those headends you wish to view from the left panel and click on the right arrow button to move them to the Selected Headend(s) list. You may select multiple headends at the same time by holding down the CTRL key. To remove a headend from the monitor, select it from the right panel and click the double red arrow to place it back in the Available Headend panel.

Refresh Interval:

Select how often in seconds you want the information to be refreshed. This interval is used with the Auto Monitor Refresh Options listed below. Recommended Setting: 4 minutes.

TBGS Time Zone (GMT):

Select the hour interval of the location of the TBGS from GMT time. (ex. Jacksonville, FL is -6:00 hours from GMT)

Once you have made your changes, click the "OK" button . This will save your changes and close the Headend Configuration screen.

To view your configured headends, you will need to close the monitor and then load the monitor . There are two ways to close the monitor. You can select "Close Monitor" from the File menu or simply click on the "Close Monitor" button located within the Quick Button Bar. Loading the monitor can also be done via the File Menu or the Quick Button Bar.

Verification Types:

Verification files (.VER) are based on the images of schedule files and include the results of that day's inserts. As each break airs, fails, or expires, the appropriate code for each spot is updated and written to the verification file in the ad inserter and then sent back to the TBGS.

From the Configuration Menu, select the type of verification file you would like data to be pulled from: the Local Verification file, an Interconnect Verification file or the Raw Verification file which is the merged Local and Interconnect verifications. It is recommended for normal operation to use the Raw Verification.

Monitor Refresh Options:

The break information within the monitor can be updated automatically or manually. To turn auto refresh on, select Configure> Monitor Refresh > Enable. Enabling the Refresh option will refresh the content based on the Refresh Interval you have designated in the previous Headend Configuration panel. Disabling the Refresh option will keep the content static unless you refresh the monitor or close and load the eyeMonitor application again. If enabled, eyeMonitor will automatically refresh and align each channel to the current on air event. To manually refresh the monitor, click Refresh Monitor Recommended Setting: Enabled.

Scheduled Time Format:

(Show Seconds, No Seconds) Selecting "Show Seconds" will list each break in the grid with the format HH:MM:SS. Selecting "No

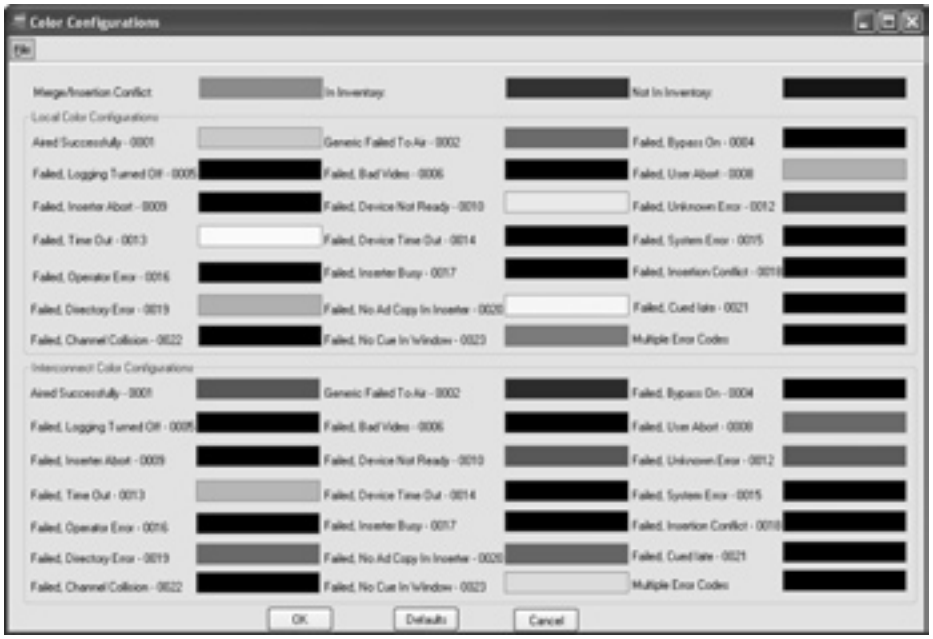
Seconds" will prevent the seconds from being displayed in the break.

Customizing Your View

To modify how the individual headends are viewed within eyeMonitor, you can use Configuration > Grid Tiling or the Window (Tile, Cascade) Settings to arrange them. Another option is to drag, drop and resize the individual headends to your liking. Once you are satisfied with your view, you must save your layout before closing the monitor or your arrangement will be lost. To save the layout, Select Window> Save Layout from the menu. Keep in mind that only administrators can save the layout.

Color Configuration:

The Color Configuration screen (Figure 3.2) defines all of the event codes and their corresponding colors. These colors are used as backgrounds per break on each headend within eyeMonitor to help



define status conditions. Consider using the same color configuration at all of your monitor work stations as well as the TBGS.

Figure 3.2

To change a color for a specific event or condition, select "Color Configuration" from the Configuration menu. Locate the condition you wish to set the color for and click on it's corresponding color box. A color selector will appear. Select your preference and click ok.

Once you have completed your color choices, click on "OK". This will save your changes and close the configuration window.

To restore your color selections to their default settings, you will need to click on the "Defaults" button and then the "OK' button. For a full explanation of the events listed on the Color Configuration screen can been found in Appendix E , Verification Status Codes.

Note: When selecting your colors, keep in mind that the text within each break is set to black so selecting lighter colors will provide the most readable text.

Scrolling Options:

When viewing eyeMonitor, you can select whether or not you wish to view each headend panel as an individual scrolling window or if you want the ability to scroll all headend panels at once. To set your preference, go to Configuration > Scrolling Options and select Individual Scroll or Scroll All.

Grid Tiling Options:

Grid Tiling allows you to select either horizontal or vertical tiling of headends within the monitor window. Horizontal Tiling will stack the headends one on top of another. Vertical will place them in a row side-by-side.

Channel Tiling:

Select the preferred orientation of the channels within each headend. Horizontal will list the channels vertically in the left-most column, and the break content for that channel a horizontal row. Vertical will list the channels horizontally across-the-top and the break content of each channel in a vertical column.

Note: The typical setup is for Grid Tiling to be set to Horizontal and Channel Tiling to Horizontal. This setup allows you to see more breaks at one time. (Figure 2.4)

Chapter 4 - Using eyeMonitor

eyeMonitor displays multiple headends and the schedule and verification content of those headends for a 24 hour period.

Monitoring Headends & Spots

The headend grids within the Monitor display the breaks for each headend for the date designated in the "Date to Analyze" field at the bottom of the monitor screen. When eyeMonitor was configured, the background colors for each of these breaks was set based upon their current condition. In addition to this stand-out feature, a countdown timer to the next missing spot is displayed in the headend header bar. Among these alarms, the most time-crucial alarm is then placed in the quick buttons section of the monitor.

A missing media countdown timer for all headends is displayed in the quick buttons section that can be clicked on for more details.

Break Detail:

While in the headend grid, double click on any break to get the details of the break. Figure 4.1 shows the Break Detail Window.

The following information is provided within the Break Detail Window.

Schedule Time: T&Bs approximation of the time of day when the event will occur (formatted - HH:MM:SS)

Window Start Time: Time of day to begin window of opportunity for event to occur (formatted - HH:MM)

Window Duration: Length of window of opportunity for event to occur (formatted - HH:MM)

Window End Time: The ending of the window of opportunity for the event to occur (formatted - HH:MM)

Position in Window: Break sequence number within window of opportunity for event to occur.

The break detail grid has the following columns:

Position: Position sequence number for event within a break.

Spot ID: T&Bs spot identification code used by adManage as the commercial file name.

Client: Advertiser's name as identified in Traffic and Billing Schedule.

Spot Title: Name of Spot as identified in Traffic and Billing Schedule.

Scheduled Length: Scheduled event length (formatted - HH:MM:SS)

Scheduled/Fill: Identifies the spot as either being scheduled contractually or used as filler in order to complete a commercial break.

Tag: The channel-headend (cchhh) tag used by adManage for unmerging verifications into local and interconnect destinations.

Status Code: Completion status code. See Appendix E for Status Code details

Verified Time: Time of the actual insert or if an insert failed then the word FAILED will be shown.

View Verification File - This button will open a new window with the native VER file. These .VER files follow the format outlined in Appendix F.

Note: you must have a valid mapped network drive to the TBGS to view the actual verification file.

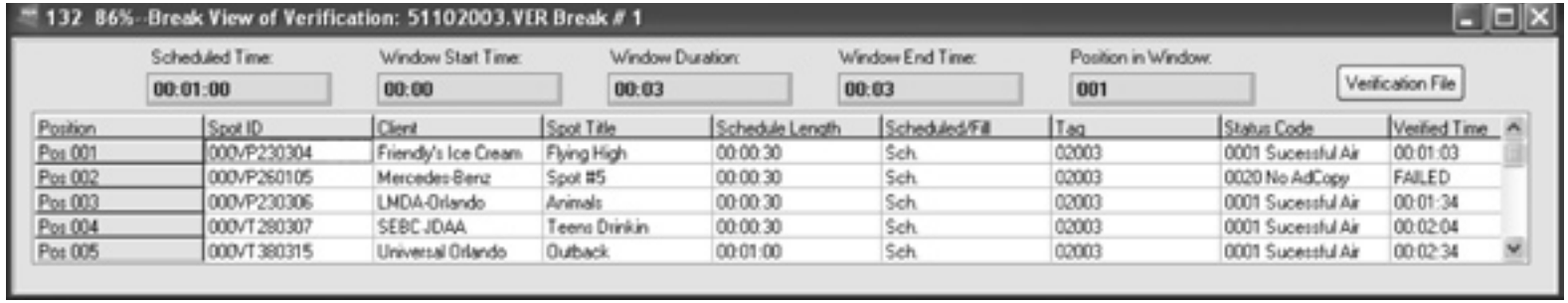


Figure 4.1

Right Click Menu Options:

While your cursor is placed within any headend/zone grid, you have several options available from the right-click menu. (Figure 4.2)

Figure 4.2

Refresh: Refreshes the break information for the specified headends and moves the view to the current event.

Headend Analysis: The headend analysis screen (Figure 4.3) gives you a quick summary of events per headend. It displays the totals for key headend events as well as channel specific events. The events detailed in this report are:

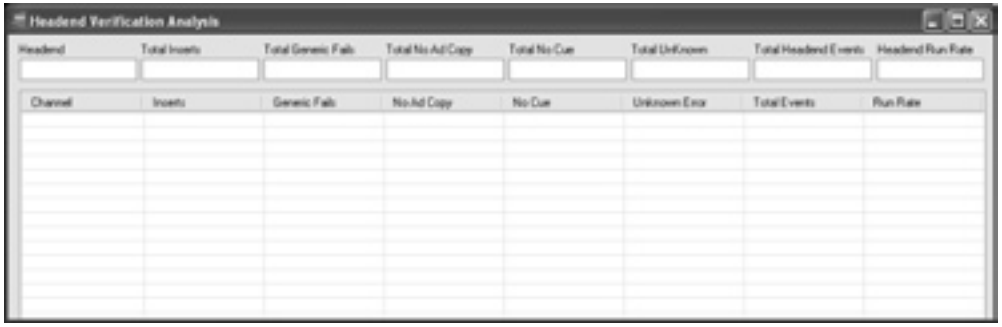


Figure 4.3

Inserts: The number of successful inserts that have occurred in the current 24 hour period.

Generic Fails: The number of scheduled event which failed.

No Ad Copy: The total of inserts that failed because there was no ad copy available. Causes include material not copied into the MVL. The material is not inserted because of a communication error. The material is on the headend purge list.

No Cue: The number of failed inserts due to an undetected cue tone within the service window.

Unknown Errors: Total of undetermined event errors.

Event Totals: The number of events that have occurred within the 24 hour period.

Run Rate: The percentage of successful inserts to possible inserts.

Verification File: The Verification File option on the Right Click menu in the headend will pull up that verification file. Refer to Appendix F for more information on the VER file. (Figure 4.4)

Figure 4.4

Refer to Appendix D: CCMS Schedule and Verification Format for content descriptions.

Log View: Duet ad inserters ftp filtered log files back to the Traffic and Billing Gateway Server. These log files or .LFR display the following content per channel.

Note: You have the ability to turn logging off within each Duet Ad Inserter. If it has been turned off, then there will be no content in the Log View window.

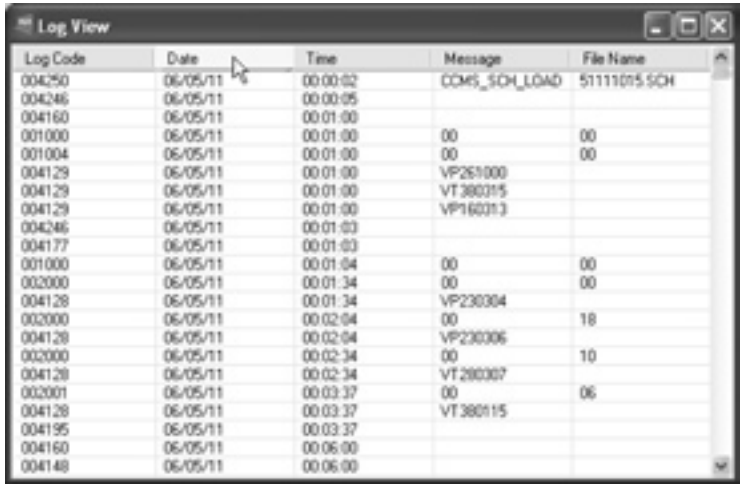


Figure 4.5

Log Code: Refer to the Duet appendix J for a complete list of error codes.

Date: Date when the logged event occurred.

Time: Time when the logged event occurred.

Message: The log message

File Name: The associated filename for the log message.

Normal Window: Normal window allows you to restore any maximized window to it's previously saved position.

Close: Closes the headend.

Spot Search

You can launch a Spot Search from the Quick Button bar at the top of the Monitor or select File > Spot Search. Within this window you can either search for the History of a specific spot (previous 14 days) or it's future schedule (following 14 days). To generate a spot search report, first select whether you are looking for the history of a spot or it's future schedule. Then select the spot ID from the drop down menu. This drop down menu contains all of the spots located in the MVL.

The data is sorted by the Tag ID number in ascending order. The columns are:

Spot Length: The length of the spot (Formatted as HH:MM:SS)

Scheduled Date: The date the spot is scheduled if you are viewing Scheduled or the date the spot ran if you are viewing the spot history.

Advertiser's Name: The name of the advertiser

Advertiser's Spot Name: The advertiser's description of the spot.

Tag: The tag is the Channel-Headend (CCHHH) where the spot is scheduled.

Expiration Date: If the ad is scheduled to expire, this lists the expiration date. (Formatted YYYY-MM-DD)

First Air Time: The first air time is the first time in the schedule day that the spot played.

Occurrences: The number of times the spot was a part of the schedule or history depending upon your search criteria.

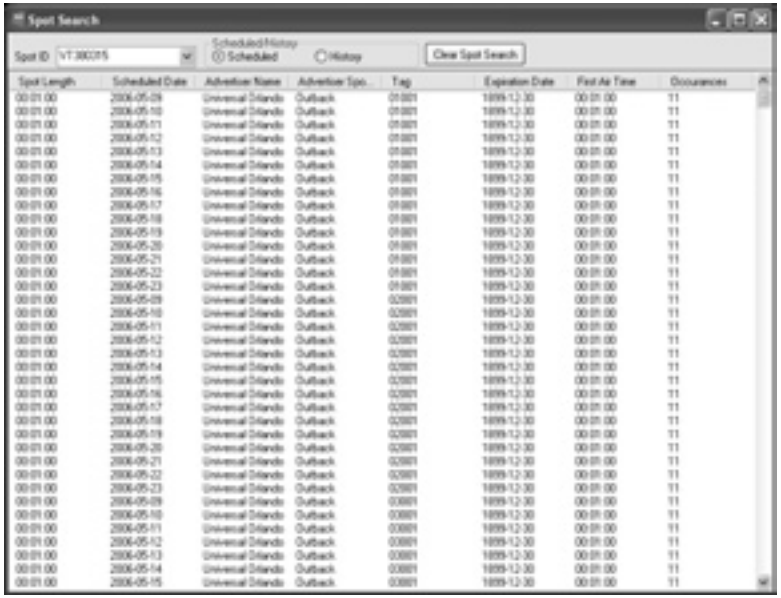


Figure 4.6

Advanced Features

Spot Replace: As an advanced feature, you may replace a video (spot) with a different one within the schedule. (Figure 4.7) This is mostly useful when needing an immediate solution for a MISSING spot. It should not be used under normal operating procedures where schedule changes are handled by the Traffic system.

NOTE: Spot Replace will replace all of a selected Old spot with the selected New spot. This process may not be reversible without recreating local or interconnect schedules.

This is a manual process; it actually changes the schedule in the merged schedule folder of the TBGS. That schedule will be sent to the Duet during the next schedule transfer.

The frequent use of spot replace will cause eyeMonitor and it's the alarm run rate report to report success rates higher than your traffic and billing's run rate report.

Under normal operation, schedules should be changed in your traffic and billing software in order to have accurate scheduling and verification processes.

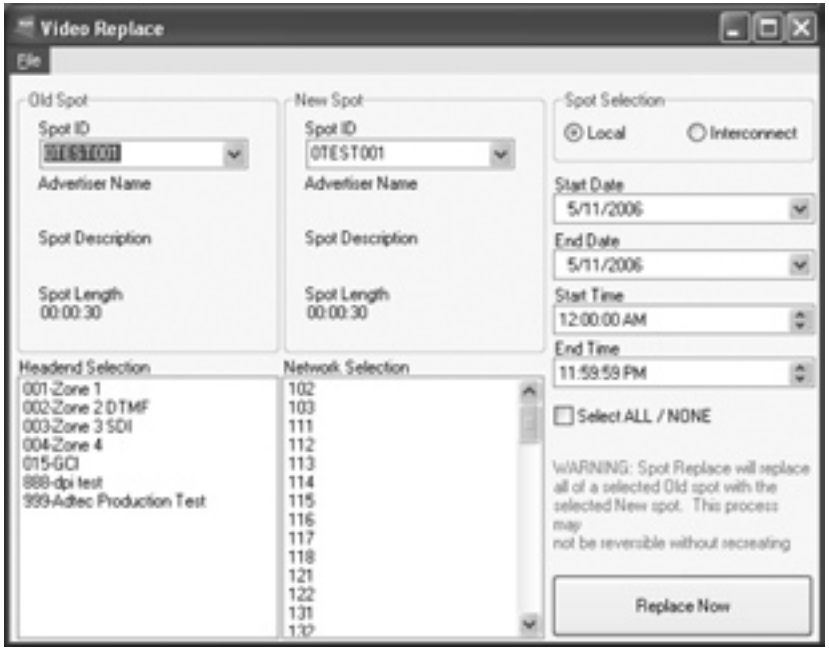


Figure 4.7

To replace a spot, select the name of the spot you wish to replace in the Old Spot section. The available spot names are generated from the database and placed in a drop down menu. Once you have selected the Old Spot, the meta data for that spot will be shown for confirmation purposes.

Now select the new spot from it's drop down menu list and double check the metadata to confirm you have selected the correct file.

In the section below, choose which headend(s) and/or channel(s) you want to make a replacement on. If you want to make the change for all headends and channels, check the Select All/Non check box and all will be highlighted. Clicking on Replace Now will make the replacement and then close the Video Replace dialog box.

The Spot Selection section of this screen allows you to narrow the criteria for the replacement. If you want to limit the replacement to a specific Date and Time range, you can make those selections prior to the replacement. The spot selection of Local or Interconnect will list the scheduled spots originating from one of those schedule sources.

Tools

Launch autoDialer:

The Launch autoDialer menu option will start the autoDialer application. Refer to the autoDialer chapter in the manual for more information on autoDialer.

Chapter 5 - Using AutoDialer

autoDialer provides redundancy for adManage schedule distribution, verification and log file retrieval from the headends and central office. It can also be used with disconnected headends to manage schedules and verifications. It communicates with each headend and the adManage application via LAN/WAN or over a standard dial up connection.

Client PC Installation

To install autoDialer on a client Windows PC (not the TBGS) you will need to be on the same LAN/WAN as the TBGS and will need to mapa network drive to the TBGS data folder before installing the software.

To map a network drive:

1. Right click Start > Explore.
2. Enter \\IPA in the address field where IPA is the IP address of the TBGS server. (Use the format XXX.XXX.XXX.XXX.)
3. Right click on the shared TBGS folder on the server and select "Map Network Drive" from the drop down menu.
4. Enter a Drive letter. Use one that is available (typically Z:\) and select "Reconnect at logon".

You may now run the autoDialer software installer. The instructions for Installing the software on a Client PC or the TBGS are the same.

To install autoDialer either insert the software CD on your computer or double-click the install file if you have been provided one. You will need to select one of the following four options for installation.

Figure 5.1

No Questions Asked Installation - This option recommended will install autoDialer using default settings.

More Information - Provides you with release notes for the current version and the ability to print them.

Select Components and Install - You may select which components of the product you wish to install. You can run this option after an installation has completed to add or remove components.

Advanced Options Installation - Allows you to designate specific folders for the Program Files, Common Files and Start Menu items.

Do Not Install - Closes the install application.

Once you have completed the installation process, you will need launch autoDialer and set several configuration values.

Initial Setup

Launch autoDialer by double-clicking the icon on the desktop or browse to Start > All Programs > Adtec > autoDialer. Additionally, you have the ability to launch autoDialer from within the eyeMonitor application by going to Tools > Launch autoDialer. You will be prompted to complete the Initial Setup. See Figure 5.2.

Figure 5.2

TBGS

If you installed autoDialer on the TBGS, you will need to check the box at the top of the initial screen "Installing on Server". This will fill the input boxes with the default Computer Name and Default Path. Click on the Save button to save these settings.

Client PC

If you installed autoDialer on a Client PC, you will need to make sure that the checkbox is not checked and then enter the correct information for the IPA/Computer Name and the Data Path. Click on the Save button to save these settings.

Notes: Use the format XXX.XXX.XXX.XXX when entering the IP Address. If completing initial setup on a Client PC, the Data Path is the network drive which you mapped prior to installation.

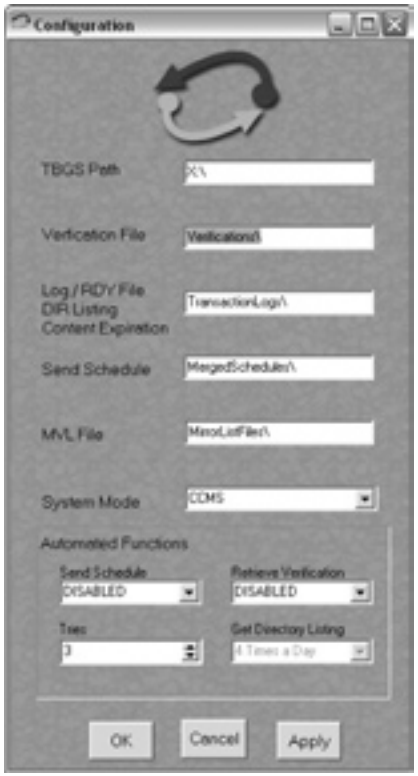
You will receive a message stating that you need to restart autoDialer to verify your host settings. Click "OK" and then the "Close" button on the Initial Setup screen. You will need to restart autoDialer.

2. Under File>FCP/CCMS set autoDialer to operate in CCMS mode.

Configuration

To modify the autoDialer Program Configuration, browse to File > Configuration. (Figure 5.3)

Note: All configured paths must end in a trailing backward slash.



TBGS Path: This is the drive letter of the mapped drive from the TBGS on the remote machine. If installed on the Gateway Server, the path will just be C:\tbgs\.

Verification File: This is the location of the verification files.
Recommended setting: Verifications\

Log / RDY File DIR
Listing Content Expiration: This is the location of the folder containing the transactionlog files.
Recommended setting: TransactionLogs\

Send Schedule: This folder contains the merged schedules
Recommended setting: MergedSchedules\

MVL File: The location of mirror list files
Recommended setting: MirrorListFiles\

System Mode: The system mode defines what type of system the autoDialer is used with. For standard enterprise commercial ad insertion, the system mode is CCMS. When autoDialer is used as part of a Satellite Serviced System, FCMP is used. You can also set/reest this value by browsing to File > CCMS / FCMP.
Recommended Setting: CCMS mode

Automated Functions:

There are several processes that are set up to function automatically without user initiation when the autoDialer application is running.. You will need to set some configuration variable for these processes.

Send Schedule: This is an automated function that will send schedules to all units at every headend connected to the system at a scheduled interval. The default setting is Disabled or turned off but can be set to run at many different times to better suit your needs. **Recommended Setting:** Disabled. autoDialer should only be used on an exception basis to send schedules .

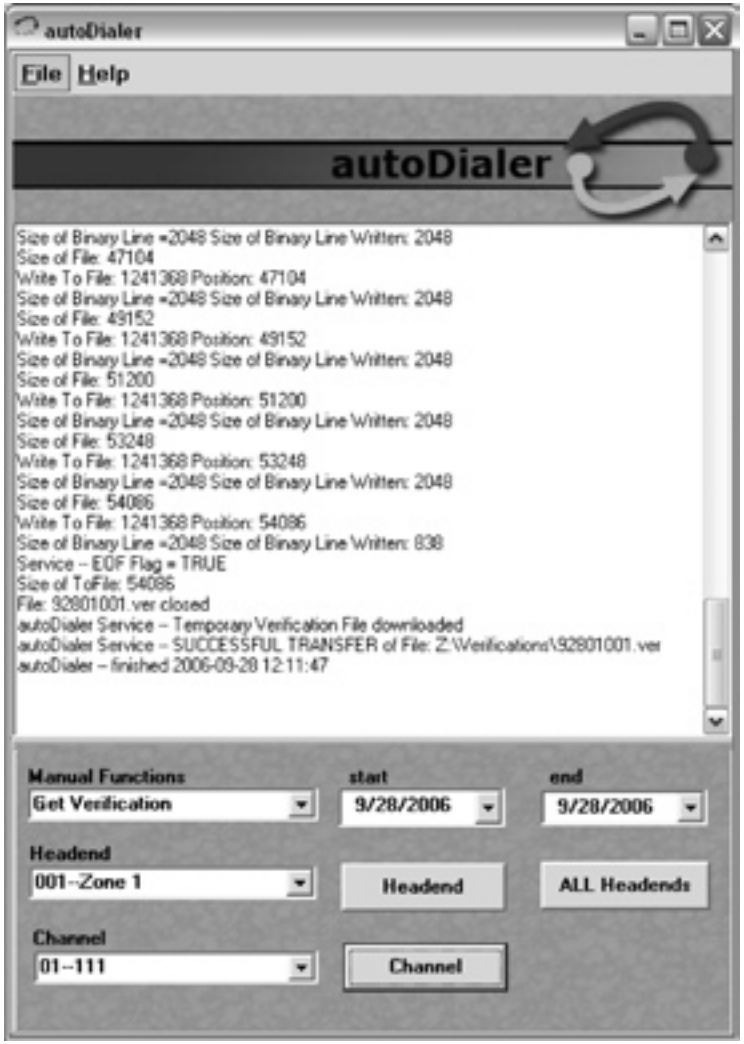
Retrieve Verifications: This is an automated function that will allow the scheduled retrieval of verifications for all units at every headend connected to the system. The default setting is Disabled but can be configured to run at varying intervals. **Recommended Setting:** Disabled. autoDialer should only be used on an exception basis to retrieve verifications.

Tries: This is the number of times the program will attempt to perform a scheduled task before progressing on the next channel / headend. (max is 8)

Get Directory Listing: Setting only applies to FCPM System Mode Configurations. This is an automated function that will retrieve a directory listing from all units at every headend connected to the system. The default setting is 4 times a day but can be configured to run at different times to better suit your needs.

Using AutoDialer

The main autoDialer screen allows you to view and control the connection process between the application and each headend. autoDialer will first use the LAN connection as configured for that channel in adManage. If the LAN does not connect, autoDailer will use the configured dialup connection to the headend.



Manual Functions:

Get Verification: This function will retrieve the verification file from a channel, headend, or all channels and headends connected to the system within specified date range and place it in the verifications folder on the TBGS.

Get LFR: To use this you have to have the LFR function enabled. This function will retrieve the LFR file from a channel, headend, or all channels and headends connected to the system within specified date range

Get Log: Used in conjunction with the TRACE function of the inserters. This function will retrieve the LOG file for a channel, headend, or all channels and headends connected to the system within specified date range and place it in the configured log folder on the TBGS

Get RDY: This function will retrieve the RDY file from a channel, headend, or all channels and headends connected to the system within specified date range and place it in the configured log folder on the TBGS

Get CCMS: This function will retrieve the RDY and the verification files from a channel, headend, or all channels and headends connected to the system within specified date range and place it in the appropriate folders on the TBGS.

Send Schedule: This function will send schedules to a channel, headend, or all channels and headends connected to the system within a specified date range

Send CCMS: This function will send the MVL file and schedules for five days to a channel, headend, or all channels and headends connected to the system.

Help > About: To determine the autodialer Program version, browse to Help > About.

Manual Function Variables:

Start Date: The beginning date in which to perform the manual function selected.

End Date: The end date in which to perform the manual function selected.

Headend Selection: The headend in which to perform the manual function selected.

Use the Headend button to the right of this field to perform the selected function to the entire headend and all of its channels.

Use the All Headends button to perform the selected manual function to all headends and channels connected to the system.

Channel Selection: The channel from the headend selection above in which to perform the manual function selected.

Chapter 6 - Creating Reports

When generating reports, keep in mind that the report data reflects all headends, not only the ones you have designated as part of your monitor/view.

Encode List

The encode list report (Figure 5.1) shows a list of spots that have been scheduled but do not exist yet within the Master Video Library on the TBGS. Once these file have been encoded, they should be saved in the MasterVideoLibray folder of the TBGS.

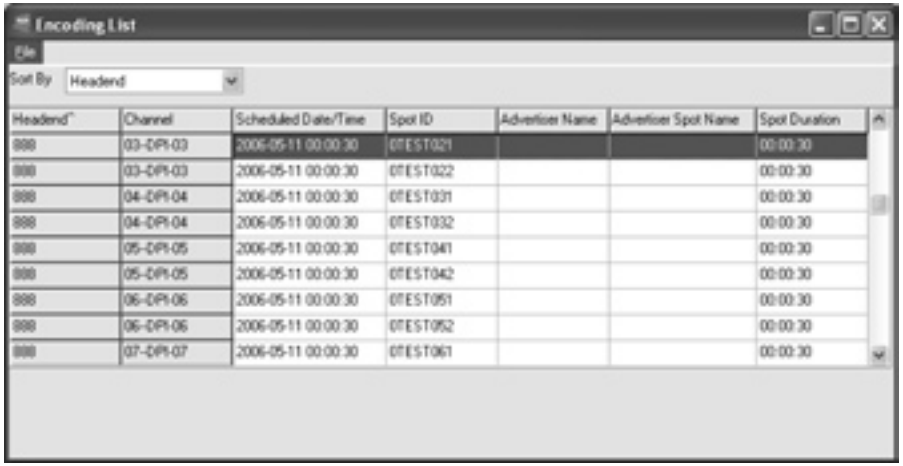


Figure 5.1

Conflict List

The conflict list report (Figure 5.2) shows a list of all merge conflicts between local and interconnect schedules. When configuring your headends within adManage, you were able to select which set of schedules takes precedence. This list shows the which file was overridden and the date and time it occurred. This list can be printed by selecting Print from the File Menu.

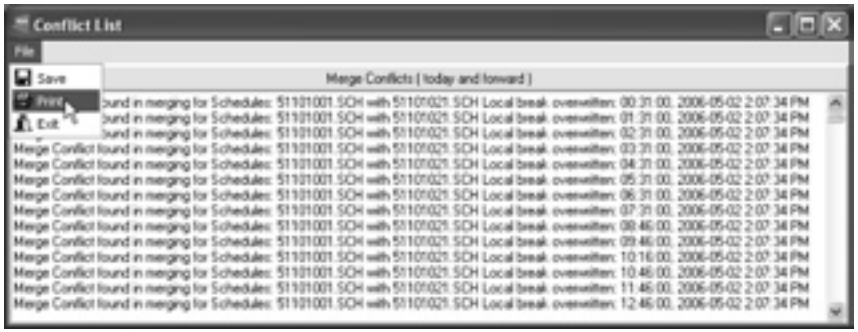


Figure 5.2

Missing Content

The missing content report (Figure 5.3) shows a list of content which is scheduled but not located on the ad inserters.

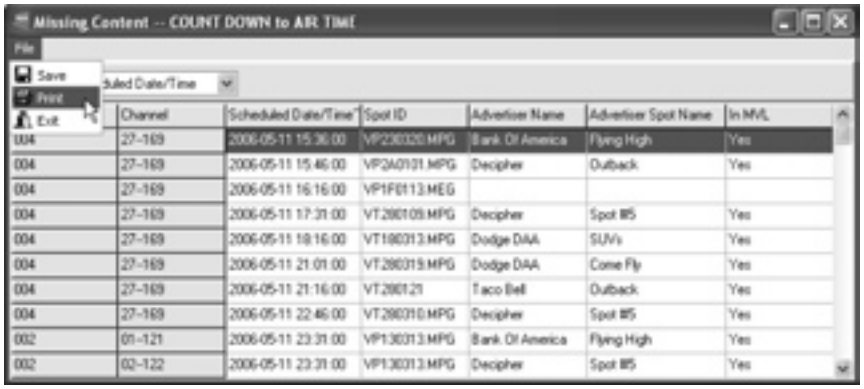


Figure 5.3

By default, this list is sorted by Schedule Date and Time so that the most time-critical information is at the top of the list. The list can be sorted by any of it's categories by making that selection in the drop down box at the top of the screen. This reports tells you the Headend, Channel, Scheduled Date and Time, Spot ID, Advertisers Name, Advertisers Spot Name and whether or not the Spot is in the MVL. Any content which is defined as NOT being in the MVL will also appear on the Encoding List.

This list can be printed by selecting Print from the File Menu.

Current Alarms

The current alarms report (Figure 5.4) shows a list of operations alarms which have not been acknowledged. This list includes notification of all alarms assigned to the logged in user as configured in adManage. Alarms can include Missing Local Schedules, Missing Interconnect Schedules, Missing Merged Schedules, Missing RDY Files, Connection Errors, etc..

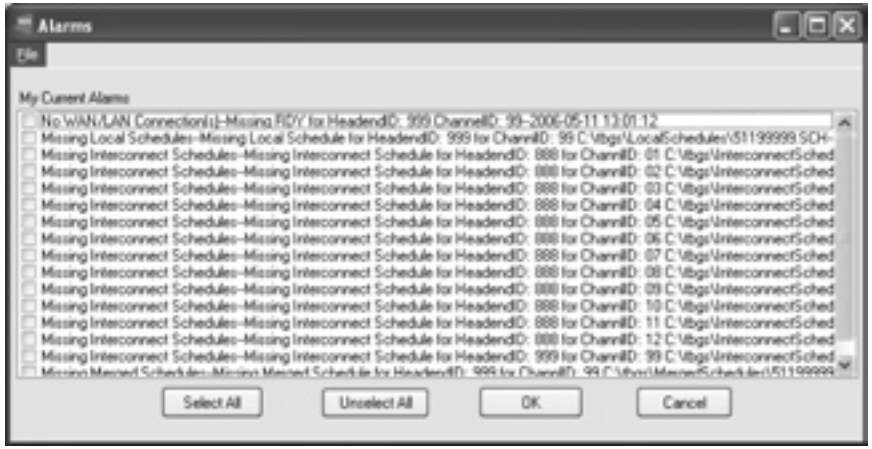


Figure 5.4

As each of these alarms is handled, you can remove then from the Current Alarms report by checking the checkbox next to it. The next time the report is run, the checked items will not appear.

Schedule Report

The schedule report (Figure 5.5) shows whether or not the schedules for your ad inserters have been properly loaded. The report can be expanded to show up to a 14 day period. To change the date range, select the dates from the drop down boxes and click on the refresh button.

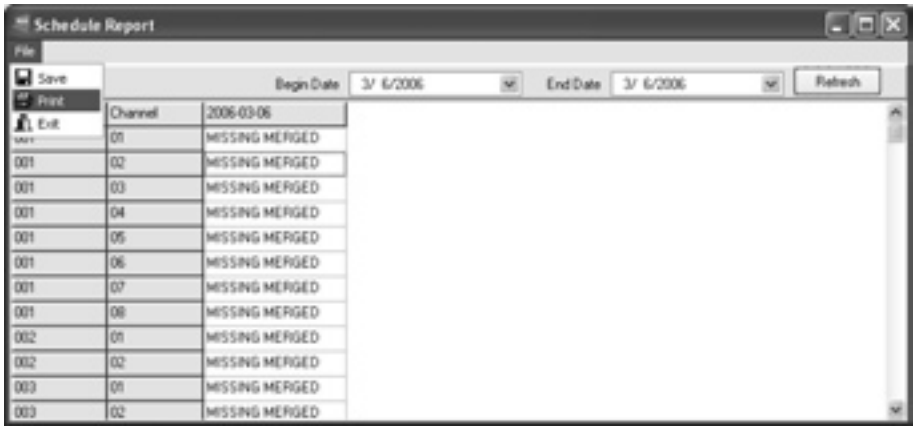


Figure 5.5

There are three possible messages that will appear.

Missing Merged - This message means that the schedule is not in the MergedSchedules Folder on the TBGS. Possible causes of this is that the original Local or Interconnect schedules have not been produced by the Traffic system or that there is a technical issue with the adManage merger service.

MC Date - Time Stamp - The .SCH file is located on the inserters but there were Merge Conflicts. To view the individual .SCH files for each channel, you can double click on the date/time stamp and the .SCH file will open in a new window. The top of the window will outline the Merge Conflicts that occurred.

Date Time Stamp - The .SCH file with that time date stamp is located on the inserters and there were no conflicts. To view the individual .SCH files for each channel, you can double click on the date/time stamp and the .SCH file will open in a new window.

Missing - The schedule is missing from the ad inserter. The possible cause could be a network communication error between the TBGS and the Duet/DPI.

This list can be printed by selecting Print from the File Menu.

Verification Report

The verification report (Figure 5.6) shows whether or not the verification files for each ad inserters has been properly relayed back to the TBGS. The report can be expanded to show up to a 14 day period. To change the date range, select the dates from the drop down boxes and click on the refresh button.

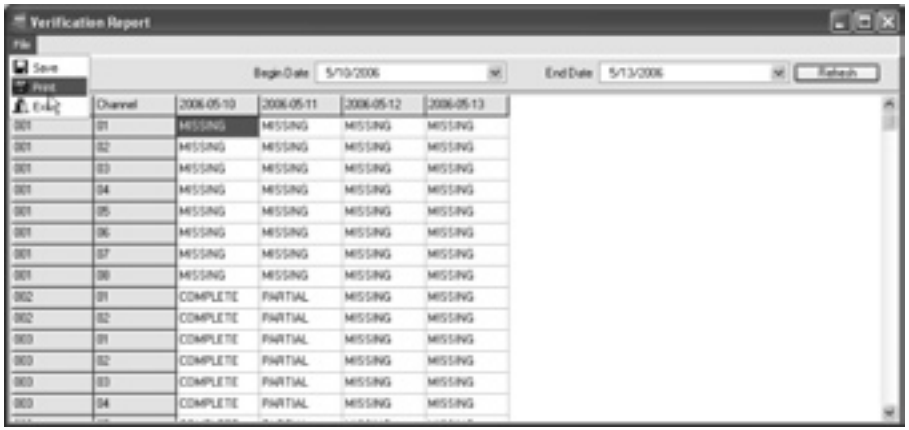


Figure 5.6

There are three possible messages that will appear

Missing - The verification file is missing from the TBGS. Possible causes for this could be a network communication error or a problem with the ad inserter.

Partial - The verification file is partially complete. This message occurs on the current day when the full day of verification status codes have not been updated. If a partial verification is shown from a previous day, the ad inserter did not return the final verification for the day. Possible causes could be a network communication error or a problem with the ad inserter.

Complete - The verification files is complete with all of the verification status codes updated for the day.

The verification reports can be printed by selecting Print from the File Menu.

Discrepancy Report

The discrepancy report (Figure 5.7) shows all events except for those that played successfully so you can quickly identify issues that are preventing the ads from playing correctly. The report can be sorted by headend or channel and can be narrowed via specific headend and start and end dates. This report can be printed by clicking on File > Print.

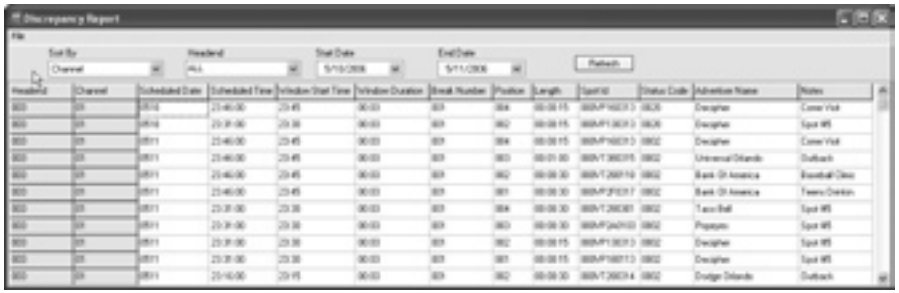


Figure 5.7

For each unsuccessful event, the report displays the Headend, Channel, Schedule Date, Scheduled Time, Window Start Time, Window Duration, Break Number, Position, Length, Spot ID, Status Code, Advertiser Name and Notes.

Appendix

A - Contacting Customer Support
B - TBGS/adManage Technical Reference
C - Ad Insertion Enterprise Solution
C1 - Traffic & Billing Central
C2 - Connected Headend
C3 - Satellite Serviced Headend
C4 - Disconnected Headend
D - CCMS Schedule Format
E - Verification Status Codes
F - Standard Operating Procedures

A Contacting Customer Support

Technical Support and Customer Service includes troubleshooting product/system functional operations concerning Adtec equipment ,embedded systems and single device issues; Service Order generation, processing and tracking; Warranty claim processing; and on-site system evaluation and maintenance. Technical Support plans do not include customer training programs. Programs incorporating customer training are defined in the Training Services Policy. Customer Services technicians provide limited instruction during a support call/email/fax in order to facilitate checking for proper equipment operation.

Telephone and Email Support

Telephone: 615.256.6619
Email: support@adtecinc.com
Internet: www.adtecinc.com/supportrequest/

Adtec Digital offers telephone, email and fax support, warranty and service related inquiries during normal business hours (9:00 AM to 5:00PM Central Standard Time CST, Monday thru Friday, except holidays. Please check the adtec website for a current list of Adtec holidays. Support Requests can also be submitted on-line.

All inquiries will be processed in the order in which they are received and by the criteria outlined in the Call Response Order. Inquiries and inquiry responses made after 5:00 PM (CST) weekdays, Saturday, Sunday or on an Adtec recognized holiday will be processed the next business day in the order received.

Callers on hold and returned calls will be prioritized by the following criteria:

- Priority-24 Subscription Customers
- Standard-Priority Subscription Customers
- All customers that have purchased Installation & Training, within 90 days of the installation
- Adtec Certified Operators (ACO)
- Limited Level Support, Warranty & Service Requests
- Multi-device system installations that have purchased Installation & Training from Adtec
- Distributors
- System Integrators
- Multi-device systems
- Single device users

Information needed for Support

To help expedite the troubleshooting process, please be prepared to provide the following information to the support representative.

Product(s) affected: Please provide a list of the Adtec Products involved including the Revision Number for each affected product.

Description of the Problem: Please include a detailed description of the problem. Include the approximate time and day the problem occurred, the spot ID of the material being inserted and what the operator reported about the incident. It is also helpful to note any recent changes to the system. More information is always better than too little information.

Your Contact Data: Please include contact information so we can reach you to discuss how to fix the problem, additional troubleshooting steps that are required or to gather more complete information regarding the problem. Please include your facility name (or call letters), your name, title, email address, telephone number, hours of work, and other contact persons if you are not available.

Advanced Support Plans

In addition to our basic Inquiry Response Policy, Adtec offers two advanced levels of priority inquiry support: Standard-Priority and Priority-24. The Standard-Priority & Priority-24 plans provide guaranteed* response times with the Priority-24 plan offering after hours and holiday support. Standard-Priority support is included with the Adtec Certified Operator (ACO) training. Contact Adtec Sales to upgrade your current support plan.

SUPPORT PLAN	PRIORITY –24	STANDARD-PRIORITY	LIMITED
Hours	24 Hours/Day 7 Days/Week	"9 AM – 5 PM (CST), Excluding Weekends & Holidays"	9 AM – 5 PM (CST) Excluding Weekends & Holidays
Call Response Time: Guaranty*	Same Day: 2 Hours (1st in order of call list)	Same Day: 4 Hours (2nd in order of call list)	48 Hours
Discounted Site Visits	25%	10%	None
Discounted Training	25%	10%	None
Repair Service: Guaranty*	1 Day Turnaround	3 Day Turnaround	None

One month free service extension will be awarded if Adtec fails to meet its service guarantee.

Standard-Priority Support Plan

Customers can improve upon our normal call processing times and can expedite inquiry support responses through our subscription Standard-Priority service plan. Under this plan all telephone inquiries are guarantied** a telephone response of no more than 4 hours after they are received (within the designated hours of operation). Telephone inquiries received by 4:00 PM (CST) on weekdays, excluding Adtec holidays are guarantied a same-day telephone response. However, inquiry responses may be made after hours until 8:00 pm (CST). Email and fax inquiries are limited in scope to normal business hours, excluding holidays. Standard-Priority customers are entitled to a 10% discount on site visit and training charges after the initial system/ product installation and training. Standard-Priority customers also receive a 3-day turnaround time guaranty* on warranty and non-warranty repairs on Adtec manufactured equipment, excluding Studio Encoders.

Priority - 24 Support Plan (24 Hour)

In addition to our Standard-Support plan, after hours, weekend and holiday support is available with the Priority-24 support plan. This plan is a subscription only service available for service inquiries 24 hours a day, 7 days a week. All telephone inquiries are guarantied* a telephone response of no more than 2 hours. Email and fax inquiries are limited in scope to normal business hours, excluding holidays. Calls after 5:00 PM will be forwarded to a Customer Services representative on call. Priority-24 customers are entitled to a 25% discount on site visit and training charges after the initial system/product installation and training. Priority-24 customers also receive a 1- day turnaround time guaranty* on warranty and non-warranty repairs on Adtec manufactured equipment, excluding Studio Encoders.

TBGS-1 Hardware Features

- Rack mount 1 RU chassis
- 400 Watt power supply
- Hot Swap SATA hard drives
- Software RAID 1 (Mirroring)
  > 160 GB storage capacity
- Dual Gigabit Ethernet NICs
- Intel Server mother board
- Intel remote Server management
- Windows 2000 Server
- FTP Server
- SQL Database
- Adtec AdManage application
- Physical 19” x 1.7” x 25.7” 30 Lbs.

TBGS-2 Hardware Features

- Rack mount 2 RU chassis
- 550 Watt Hot Swap power supplies
- Hot Swap SATA hard drives
- Hardware RAID 5
  > 400 GB storage capacity (1.5 TB max)
- Dual Gigabit Ethernet NICs
- Intel Server mother board
- Intel remote Server management
- Windows 2000 Server
- FTP Server
- SQL Database
- Adtec AdManage application
- Physical 19” x 3.4” x 25.7” 35 Lbs.

Features and specifications are subject to change without written notice.

C Ad Insertion Enterprise Solution

1 - adManage/TBGS

At the core of the adVantage solution is the TBGS traffic and billing gateway server and the adManage software application. This is the gateway that invisibly coordinates the complex flow of media and data across the enterprise. adManage streamlines the process of getting the right ads, schedules and verifications to the right places at the right times, resulting in high customer satisfaction levels and increased revenues. The powerful server architecture and SQL database offers rapid access to current data via the browser interface supporting customized alarms with notification via paging, email or text messaging.

2 - Traffic and Billing

adManage merges local and interconnect schedules to create a master insertion schedule for each channel at each headend. After commercials are played, adManage creates and sends separate verification files to local and interconnect traffic and billing systems facilitating seamless media and data management across your enterprise.

3 - eyeMonitor

The eyeMonitor interface graphically displays the status of all headends and channels in the enterprise on a single screen. It provides visibly better real time status and highlights exceptions so that corrections can be easily made.

4 - autoDialer

The autoDialer application provides a back channel for schedule distribution and verification retrieval over a simple phone line. This feature is essential for disconnected remote headends and adds redundancy in networked headends, all for the price of a phone call.

5 - adCode

New media is ingested and prepared by adCode and sent to adManage for storage and distribution to the headends. Sources can be tapes, DVDs or over FireWireTM from nonlinear editors. The architecture of adCode supports Cable Labs VOD and SCTE encoding standards, an important aspect that future proofs your investment. Use adCode to seamlessly bridge the transition from analog and SDI digital insertion to DPI. adCode prepares the highest quality DPI ready media in the industry. Compatibility with other ad insertion systems is standard innovation at Adtec.

Headends

In an ad insertion enterprise, there are likely to be several different types of headends with varying levels of connectivity available. From networked LAN/WAN to satellite to disconnected remote, adManage can work with them all. Flexibly better by design.

6 - Networked Headend

A networked headend has an existing broadband LAN/WAN connection, such as a T1 line or cable modem. adManage uses this connection to send ads and schedules and receive verifications and status monitoring. Ad insertion is performed by Adtec's scalable single-channel Duet or Duet-SDI. Since each Duet is a single-channel modular unit that is totally self-contained, the system is fault tolerant by design. Media distribution within the headend is invisibly performed via multicast techniques making it available to all inserters all the time.

7 - Disconnected Remote Headend

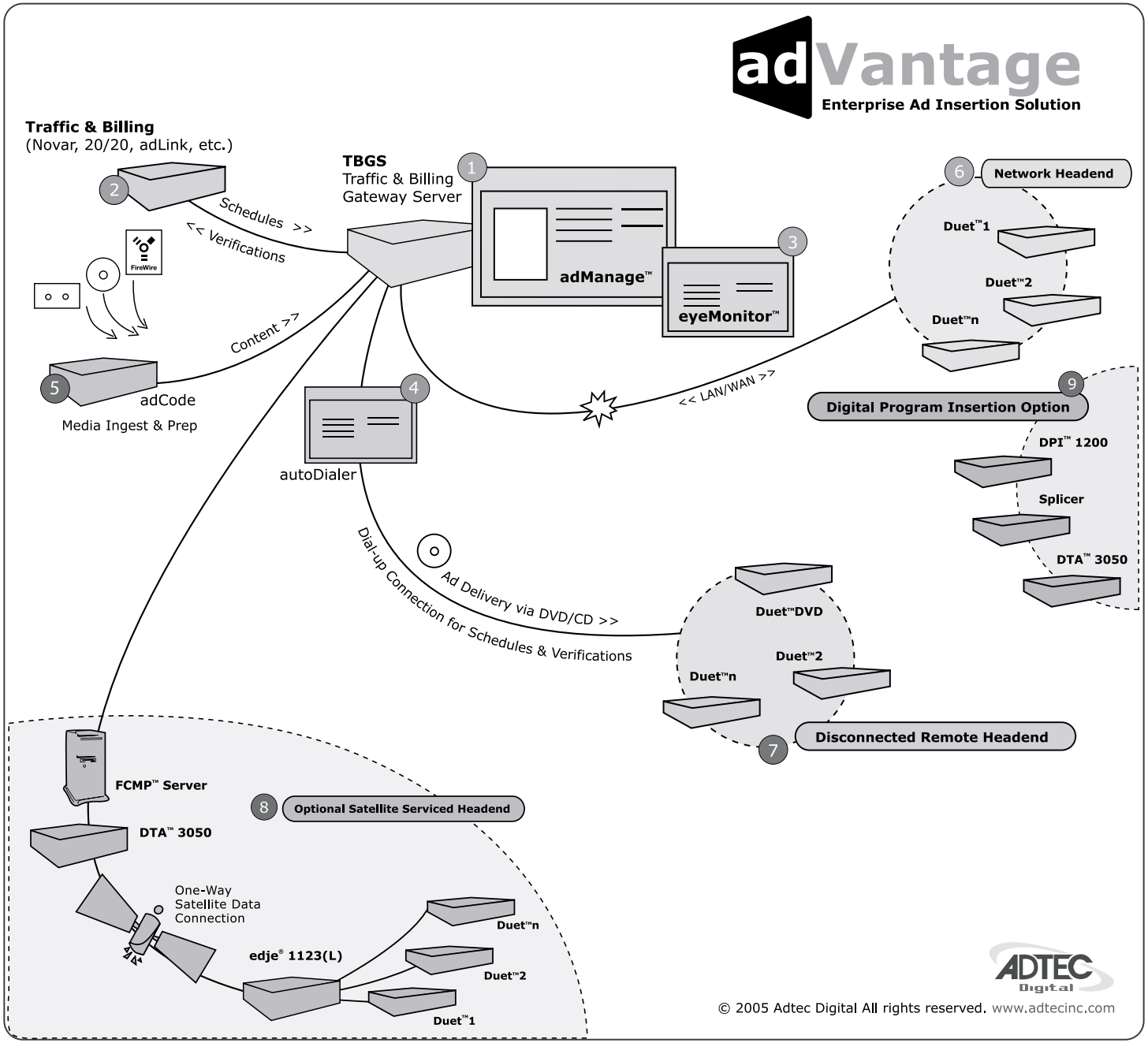
What can you do when a headend is so small or remote that it has no economical network connection and satellite is not an option? Media can be ingested by adCode and burned onto a CD or DVD and sent to the headend where the disk is simply placed into a Duet-DVD unit. The Duet-DVD automatically makes all the ads available to every unit at the headend. At the remote headend, adManage performs schedule distribution, status monitoring and verification retrieval over standard phone lines (PTSN) via dial-up modem through autoDialer.

8 - Optional Satellite Serviced Headend

In headends without a network connection, media and data distribution can easily be achieved via satellite. Here's how it works. At the central office, adManage sends the media and schedules to Adtec's FCMP server which prepares the data by adding forward error correction then multicasting it to the Adtec DTA-3050 multiplexer for encapsulation and encrypting prior to the multicast uplink. At each satellite headend, an Adtec edje-1123 with built-in satellite data receiver unscrambles and distributes the media to the Duet, Duet-SDI or DPI-1200 units. At the satellite headend, adManage performs schedule distribution, status monitoring and verification retrieval over a simple phone line with a dial-up modem through autoDialer.

9 - Digital Program Insertion Option

Adtec's DPI-1200 digital-into-transport (DIT) ad server takes the place of up to twelve Duets. Designed for the all-digital headend, the DPI-1200 will deliver seamless splicing effortlessly in concert with Duets in your analog systems. The DPI-1200 can deliver up to twelve programs to the ad splicer. adManage transparently delivers media and schedules and retrieves verifications and status monitoring in the DPI environment just as in any other type of headend.



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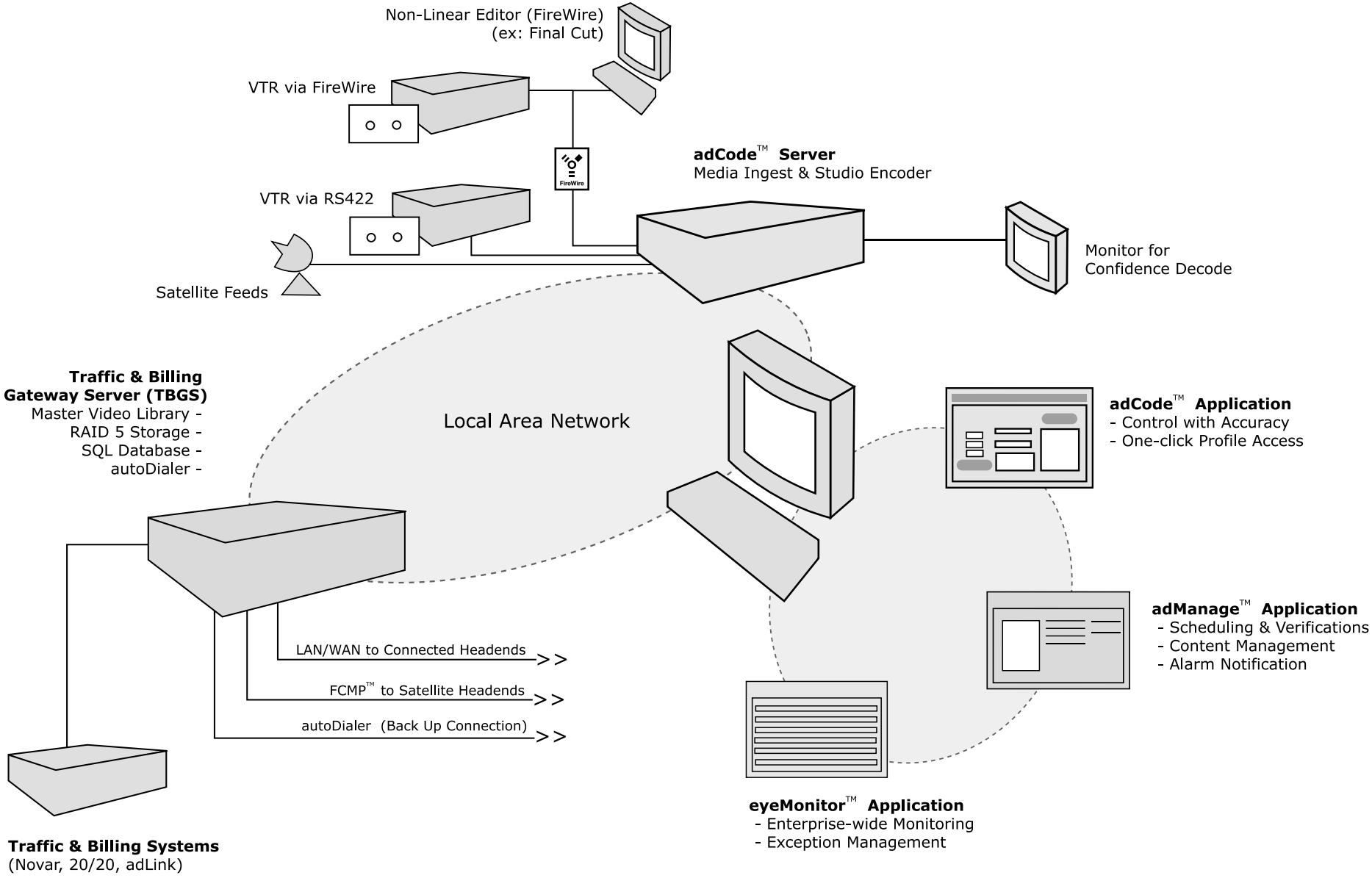
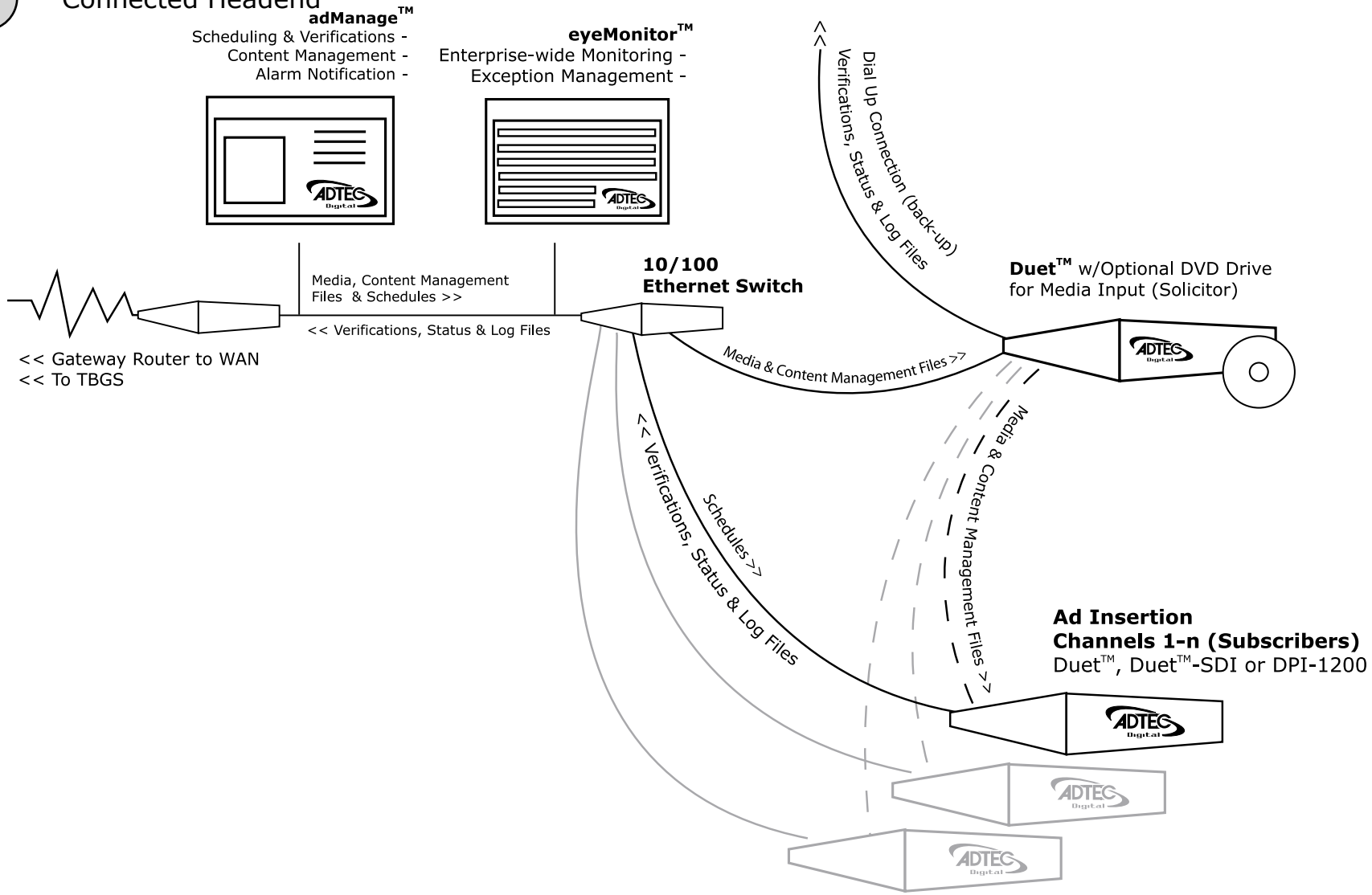
C1

Traffic and Billing Central



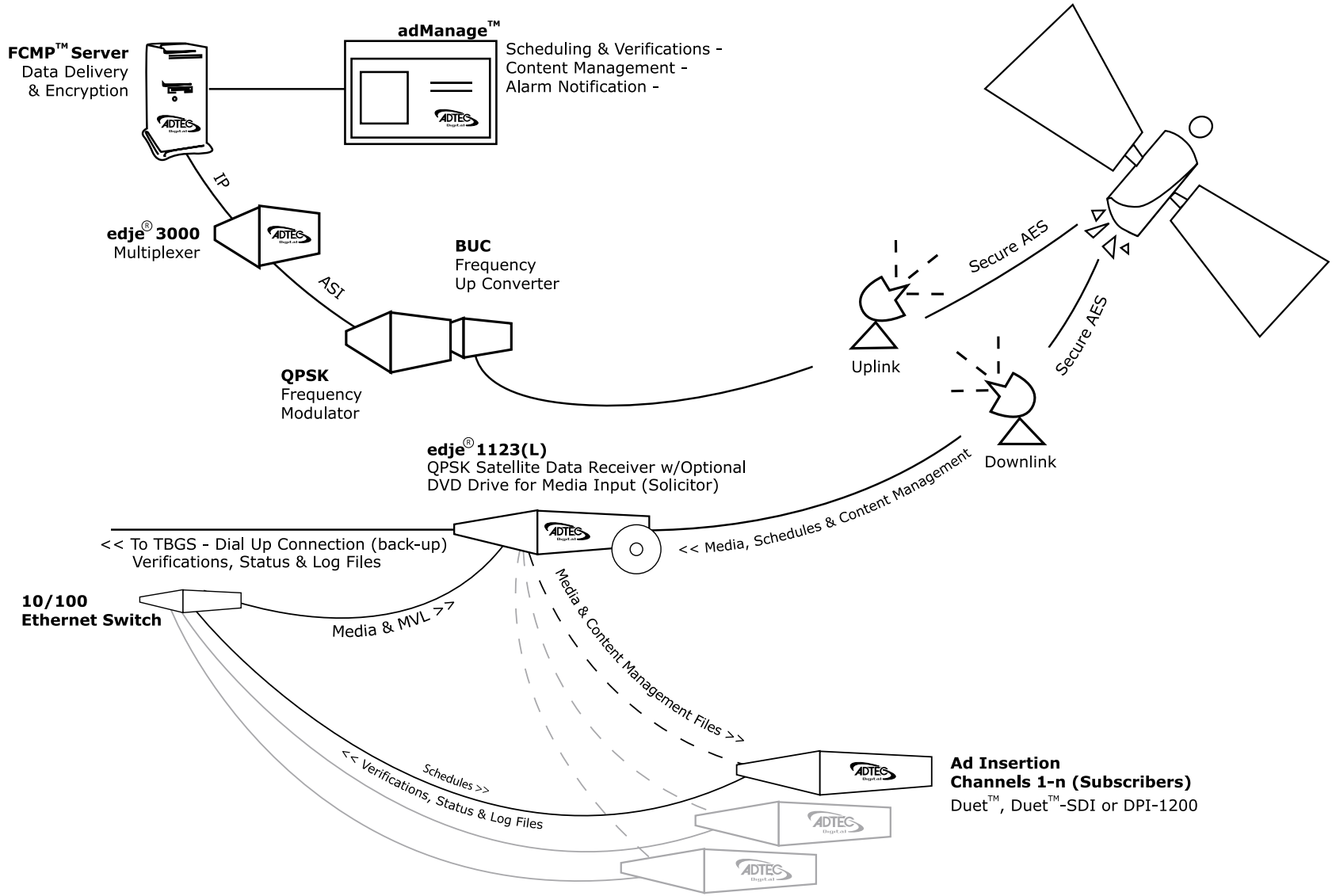
C2

Connected Headend



Adtec supports network connected headends through a LAN/WAN for delivery of media and commercial insertion schedules and central monitoring of status, verifications and content management. To minimize network traffic of large media files, the commercials and content management directives are retrieved once by the headend solicitor over FTP and then passed on locally to the other commercial inserter subscribers using an Ethernet Multicast Transfer (EMT). Each commercial inserter is responsible for retrieving insertion schedules and providing status, verifications and content management by FTP back to adManage.

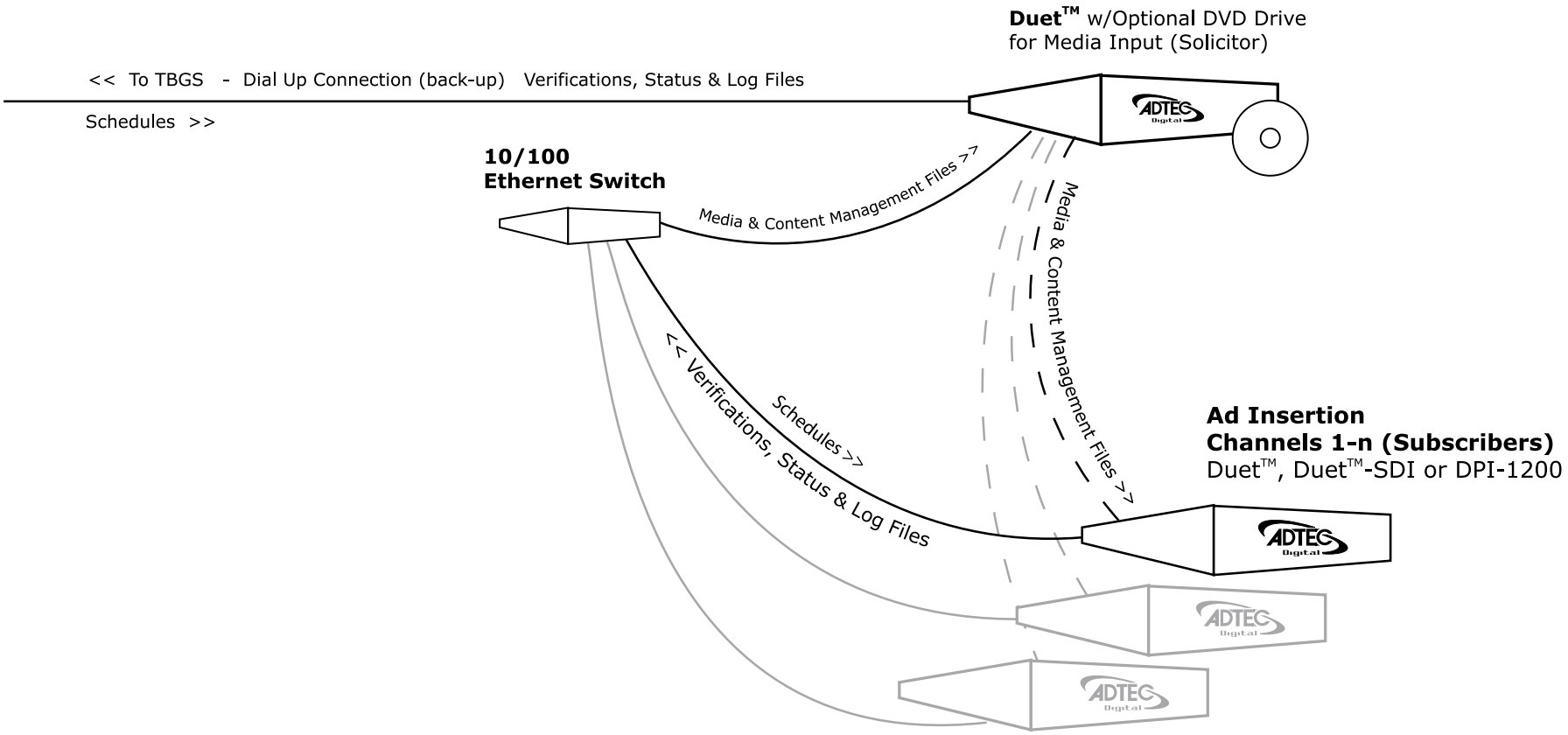
C3 Satellite Serviced Headend



Adtec supports remote headends through satellite delivery of media and commercial insertion schedules using the File and Command Multicast Protocol (FCMP) system. Commercials and schedules are sent by adManage to the FCMP server and then to the DTA-3050 multiplexer for data encapsulation and secure AES encryption.

The modulated data can be directed to one or more downlink facilities for receipt by the edje 1123(L) and use by the Duet or DPI commercial insertion servers. Central monitoring of status, verifications and content management can be provided through a dialup connection back to adManage.

C4 Disconnected Headend



A headend with just telephone access is supported by the Adtec enterprise solution. Scheduling and central monitoring of status, verifications and content management is done through a dialup connection back to adManage.

New commercials can be loaded into the headend solicitor DVD drive which are automatically passed on locally to the other commercial inserter subscribers using an efficient Ethernet Multicast Transfer (EMT).

D CCMS Schedule Format

A schedule file exists for each channel of insertion. The file name will always be eight characters in length plus the three character extension of SCH.

MDDCCHHH.SCH

M -
Represents month of intended airing.
Range 1 - C Ex. 1 = January, C = December
Hexadecimal format

DD -
Represents day of month of intended airing
Range 01-31 Ex. 05

CC -
Numeric identifier or Channel ID
Range 01-99

HHH -
Numeric identifier or Headend ID
Range 001- 099

The records within the SCH file follow the following format. Each record is terminated by a carriage return and line feed. Each record will all be at least 77 bytes in length. The fields of each record are determined by its byte position. Each field is separated by a space character. All times are formatted in military time.

The record format is as follows :

Field #	Field Name	Bytes	Description
1	Event Type	1-3	Type of event defined by record (LOI, REM,END, NUL)
2	Scheduled Date	5-8	T&Bs approximation of the date when the event will occur (formatted - MMDD)
3	Scheduled Time	10-15	T&Bs approximation of the time of day when the event will occur (formatted - HHMMSS)
4	Window Start Time	17-20	Time of day to begin window of opportunity for event to occur (formatted - HHMM)
5	Window Duration Time	22-25	Length of window of opportunity for event to occur (formatted - HHMM)
6	Break Number Within Window	27-29	Break sequence number within window of opportunity for event to occur
7	Position Number Within Break	30-33	Position sequence number for event within break
8	Scheduled Length	35-40	Scheduled event length (formatted - HHMMSS)
9	Actual Aired Time	42-47	Actual aired time of day used in VER file. (Formatted HHMMSS)
10	Actual Aired Length	49-56	Actual aired length used in VER file (formatted - HHMMSSCC)
11	Actual Aired Position Within Break	58-60	Actual sequential position number that event occurred in. Used in VER file
12	Spot Identification	62-72	T&Bs spot identification code used by adManage as the commercial file name. See Headend>File Name Length configuration on how this spot ID is converted into a file name.
13	Status Code	74-77	Completion status Code used in VER file.(See Appendix E for definition of Status Codes)
14	Advertiser Name	79-110	Advertiser's name as identified in T&B.
15	Advertiser Spot Name	112-131	Advertiser's Spot Name as identified in T&B
16	Scheduled/Fill	133-136	Identifies the spot as either being scheduled contractually or used as filler in order to complete a commercial break.
17	Traffic System Reserved	138-143	Reserved for use by the Traffic System
18	User Defined	145-NNN	For use in tracking other data. adManage uses this field in Merged schedules to identify the event line as a local or interconnect event.

E Verification Status Codes

Status Code	Definition	Possible Cause
0001	Aired Successfully	
0002	Generic Failed to Air	The scheduled event was not run by the Duet. All events are marked with a 0002 at the beginning of the broadcast day. As the event is run by the Duet, the status code is changed to an actual error code.
0004	Failed, Bypass On	
0006	Failed, Bad Video	The video stalled during playback. The actual air time will be updated. 1. File read errors occur during playback from a bad file or hard drive problem. Try replacing the video file. 2. The VERIFYERRORLMT threshold of decode errors was exceeded. Try to re-encode the file. See the Duet manual for details.
0008	Failed, User Abort	The active insert was aborted by operator intervention.
0010	Failed, Device Not Ready	Possible hard drive issue. The hard drive may not be partitioned.
0012	Failed, Unknown Error	If any stall conditions occur during playback, the spot will not be verified, even if the system was able to continue after the stall condition. The actual played length will be updated in the VER file for partial verifications.
0013	Failed, Time Out	The break was closed before all spots could be aired.
0015	Failed, System Error	Possible hardware failure.
0020	Failed, No Ad Copy in Inserter	The commercial inserter did not have the scheduled ad copy to play. Causes include: - Material not copied into adManage MasterVideoLibrary. - The material is not in the inserter because of a communication error. - The material is on the headend PURGE list (see Content Management Purge).
0023	Failed, No Cue in Window	No cue was received in the scheduled window. See the Duet manual chapter on Cue Methods for more information.

F Standard Operating Procedures

Daily:

1. Check eyeMonitor and verify that each channel has a good insertion rate for the current day.
2. Pull the eyeMonitor Missing Content Report and verify that each ad inserter has content for the current and the next day.
3. Pull the eyeMonitor Discrepancy Report and review error codes that indicate insertion failures. Implement corrective action for discrepancies.
3. Pull the eyeMonitor Verification Report to confirm that all verifications have been returned from the previous day (marked Complete). If verifications are missing or partial, correct the issue and get the final verification from the ad inserter.
4. Pull the eyeMonitor Schedule Report to confirm that all new schedules are loaded in the ad inserters. Verify the time/date stamp of the schedule for modified schedules.
5. Use the eyeMonitor Missing Content Report (or the adManage Content Management > Missing) to determine if there are any spots missing or not encoded for the schedules that are created. Correct any missing content problems.

Weekly:

1. Use eyeMonitor's Discrepancy Report to determine if there are any outstanding error or cue issues for the system as well as any patterns on missed insertions
2. Use the eyeMonitor's and adManage's Run Rate percentage Alarms and Reports to determine if any maintenance or adjustments need to be made to improve overall performance.
3. Use adManage's Content Management>Evergreen section to protect any spots that you do not want to be deleted. This will protect the spot from any type of deletion in adManage.
4. Verify that schedules and content are loaded for the weekend.

Monthly:

1. Use adManage's Content Management > Drive Status and Purge Functions to maintain inserter drive health and efficiency.
2. Use adManage's Content Management > System MVL to maintain the Gateway Server's drives and file maintenance.
3. Use adManage to setup Alarms for your users. You can assign any alarm created to any user that has been setup.

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