

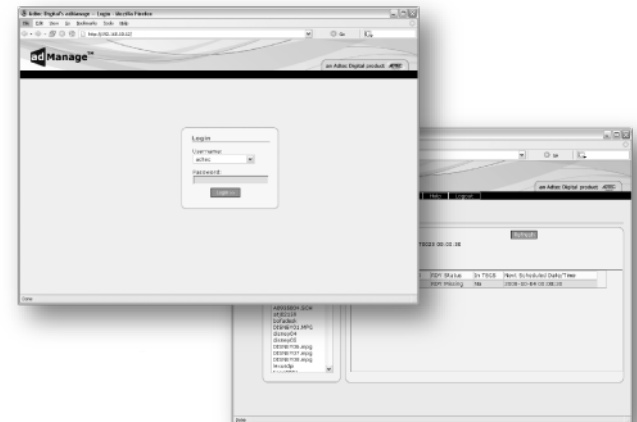
Inside:

- Introduction
- Getting Started
- Using adManage
- Using autoDialer



# adManage™

Traffic & Media Management Application  
**Operations Manual**



**purely digital**  
create. move. play. save.

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**Document Name:** admanage\_1106

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# Chapter 1 - Introduction

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## Overview

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*The Traffic & Billing Gateway Server and adManage Control application is at the core of the Adtec adVantage Enterprise Ad Insertion Solution. adManage coordinates the complex flow of media and data across the enterprise and 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. Cable and Broadcast operators looking for a turnkey content management solution will find unmatched value in the powerful server architecture, SQL database and full complement of user definable alarms providing notification via e-mail, text messaging, paging as well as visual alarming via the browser.*

## Applications

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- **Cable Digital Ad Insertion:** In a cable 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, the TBGS with adManage can bring them all together seamlessly. Compatibility with other ad insertion systems is standard innovation at Adtec.
- **Broadcast Digital Ad Insertion:** The TBGS and adMantage supports the broadcaster, whether the channel is analog, serial digital or all digital. 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.
- **Digital Program Insertion into Transport Streams:** For the all-digital headend, adManage transparently delivers media and schedules and retrieves verifications and status monitoring in the DPI environment just as in any other type of headend. Adtec is compliant with the Cable Labs VOD and SCTE encoding standards, ensuring that your investment is future proof.

## Benefits

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- Centralized control and system monitoring for your whole enterprise.
- Prioritized content management distribution to get commercials where they are needed next.
- Alarm Status via email, text messaging or paging so you are always informed of what is going on.
- Real time system status of insertion verifications.
- Support hundreds of channels at multiple headends so the system grows with your needs.

## Feature Highlights

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- Media Management with missing content monitoring.
- Interconnect commercial ad insertion with media management, schedule merging and verification splitting between interconnect and local T&B.
- Schedule management
- Verification management
- Log File and Ready File management
- SQL Database interface for eyeMonitor
- Alarm management of email, pager and text messaging with user defined rules based on time, date and system conditions.
- Browser interface gives access to adManage from any computer on the network.
- Evergreen content to each headend for material that is always available.
- autoDialer back channel redundancy for schedule distribution, verification and log file retrieval from the headends and central office. It can also be used with disconnected headends over dialup to manage schedules and verifications.
- Purge content from a headend or from the whole system.
- Archive content / system management for future use.
- Premerge services import schedules from different sources and update file names.
- Easily identify missing content from each ad inserter.

## Availability

adManage is available as part of the Traffic Billing and Gateway Server (TBGS).

Model	Description
TBGS - 1RU	<ul style="list-style-type: none"> <li>• 400 Watt power supply</li> <li>• Two Hot Swap SATA hard drives</li> <li>• Software RAID 1 (Mirroring)               <ul style="list-style-type: none"> <li>&gt; 160 GB storage capacity</li> </ul> </li> <li>• Dual Gigabit Ethernet NICs</li> <li>• Pentium 4 Intel Server mother board</li> <li>• Intel remote Server management</li> <li>• Windows 2000 Server</li> <li>• ServeU FTP Server</li> <li>• MySQL Database</li> <li>• Adtec adManage application</li> <li>• Adtec autoDialer application</li> <li>• Physical 19" x 1.7" x 25.7" 30 lbs.</li> </ul>
TBGS - 2RU	<ul style="list-style-type: none"> <li>• Dual 550 Watt Hot Swap power supplies</li> <li>• Four Hot Swap SATA hard drives</li> <li>• Hardware RAID 5               <ul style="list-style-type: none"> <li>&gt; 400 GB storage capacity (1.5 TB max)</li> </ul> </li> <li>• Dual Gigabit Ethernet NICs</li> <li>• Pentium 4 Intel Server mother board with 1GB RAM.</li> <li>• Intel remote Server management</li> <li>• Windows 2000 Server</li> <li>• ServeU Server</li> <li>• MySQL Database</li> <li>• Adtec adManage application</li> <li>• Adtec autoDialer application</li> <li>• Physical 19" x 3.4" x 25.7" 35 Lbs.</li> </ul>

## Options

Option	Description
eyeMonitor	Adtec's eyeMonitor software provides an enterprise level view of all zones and channels in real time on a single screen. It provides a graphical status of all headends and channels with detailed analysis a click away.
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.

Option	Description
FCMP	Adtec's FCMP (File and Command Multicast Protocol) software is an IP address satellite delivery system to distribute files to multiple headends.

## Client Requirements

- Web Browser with JavaScript Enabled: Web Browsers Supported: Microsoft Internet Explorer v5.0 or later; Firefox 1.0 or later;
- Javascript 2.0 or later.
- LAN/WAN connectivity to the TBGS.

This documentation reflects functionality of adManage version 2.5.4.

## Chapter 2 - Getting Started

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### Logging Into adManage

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Once your Traffic and Billing Gateway Server is properly installed you can log in and setup adManage.

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Note: If you are using autoDialer or FCMP as part of the Adtec adVantage solution, you will need to setup/configure those before configuring adManage.

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On the TBGS, browse to <http://localhost> for the adManage login page. The default user name and password is.

**User name:     adtec**  
**Password:     none**

---

Note: If using any other computer on the same network as the TBGS, you will need to browser to <http://hostname> where the hostname is the network host name or equal the IP address of the TBGS server.

---

To get started, you will need to setup user accounts, headends and channels. It is also necessary to confirm your system configuration. If you are using an FCMP server as part of your system, you will also need to complete the FCMP setup panel. All of these settings are part of the Configuration tab located in the navigation bar.

### User Accounts

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Within adManage you have the ability to create multiple users with varying access and control within adManage. Users can additionally be emailed and paged alarms as they are detected according to the rules configured in adManage. Setting alarm rules and assigning those rules to users is covered in Chapter 3 - Section - Alarm Management.

To add users, browse to Configuration > Users > Add a User. (Fig. 2.1)

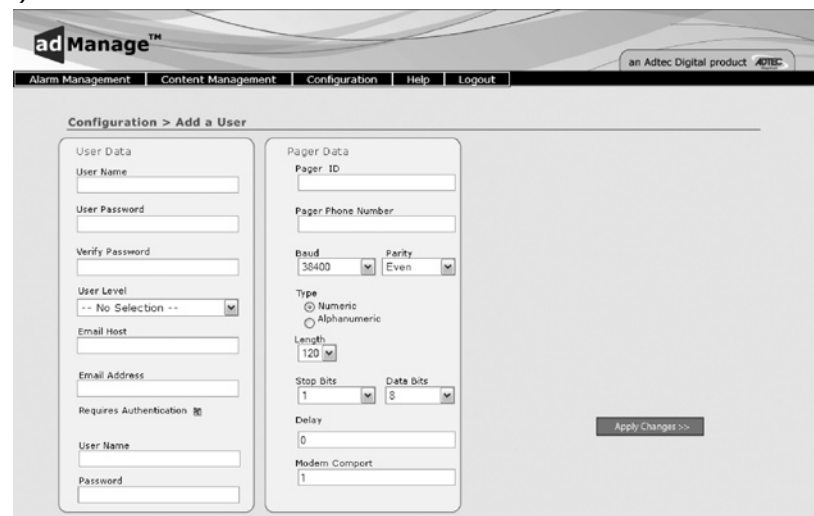


Figure 2.1

The following fields are available for each user.

**User Name:** Login name for the user. 20 character limit.

**User Password/Verify:** Password for the user. 20 character limit.

**User Level:** Each user must be assigned a level of access. The options are:

**Administrator** - Administrators have full access to all functions within adManage.

**Standard** - Standard users can use adMange but cannot make configuration changes.

**Guest** - Guest users have read-only access.

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Note: If using eyeMonitor or autoDialer software as part of you system, note that the usernames, passwords and user levels assigned in adManage are the same usernames, passwords and user levels to be used with all software in the adVantage system.

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**Email Host:** The SMTP outgoing email host that should be used by adManage to send emails to this user. Note that typically the same SMTP host can be used for all users on the system.

**Email Address:** Email address for the user. This email address will be used by the Alarm Service.

**Requires Authentication:** Indicates whether the SMTP server requires user name and password authentication for sending emails using that host.

**User Name:** The SMTP server user name to use for authentication when adManage sends emails.

**Password:** The SMTP server password to use for authentication when adManage sends emails.

*The following fields are available for any pager device available to that user:*

**Pager ID:** Phone number for the paging terminal service used. Please check with your pager provider for the terminal service telephone number which should be used.

**Pager Phone Number:** Pager phone number for the user's paging device.

**Baud:** Select the rate of data transmission specific to the pager. (Bits per second. 300, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200, 172800, 345600, 518400, 1036800)

**Parity:** Select the error checking bit specific to the pager. (None, Odd, Even, Mark, Space)

**Type:** Designate whether the pager is an alphanumeric or numeric pager.

**Length:** The maximum number of characters which can be received by a text pager. (80, 120 characters).

**Stop Bits:** A stop bit signals the end of the data message to a paging terminal. Select the stop bits specific to the pager. (1 , 2)

**Data Bits:** Data bits are the number of bits that hold the data to be transferred over a modem connection to a pager terminal. Select the data bits specific to the paging terminal. (7 , 8)

**Delay:** The paging terminal service delay in seconds.

**Modem Comport:** The serial communication port of the server which is used to connect with the telephone modem. (Typically COM1).

Once you have added a user it is possible to edit or delete that user by browsing to Configuration > Users and selecting either Edit or Delete to proceed.

---

## Headend Setup

To add a headend, browse the navigation menu to Configuration > Headend > Add a Headend. (Fig. 2.2)

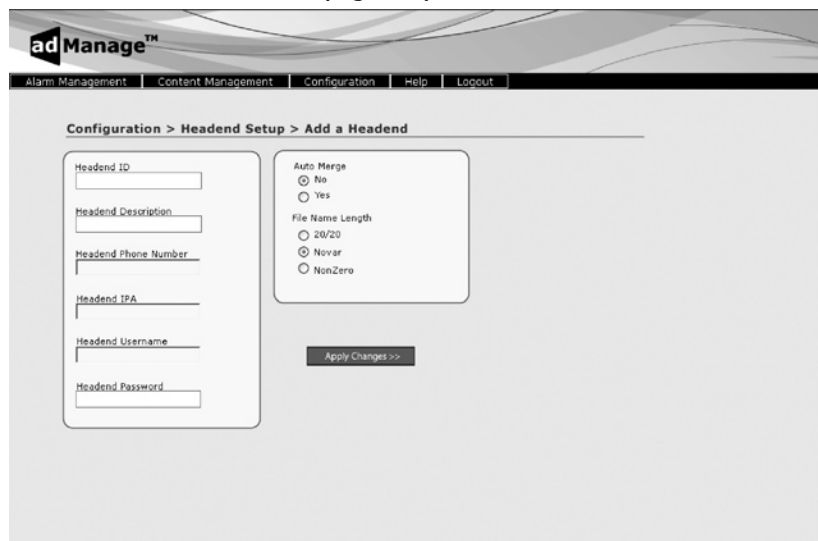


Figure 2.2

The following fields are required for Headend Setup.

**Headend ID:** A three digit identifier for the headend. This number is identified in the schedule file name from your traffic and billing system and will be a value from 001-999. To locate this value, you should refer to the file name structure of your schedules using MDDCCHHH.SCH. The number represented by HHH is your Headend ID.

**Headend Description:** Description of the headend. You are limited to 255 characters. For management purposes, a short and concise description will serve best.

**Phone Number:** The phone number of the modem used by autoDialer at the headend. Format (000-000-0000) or if dialing for an outside line with a prefix (9,1-000-0000)

**Headend IP Address:** The WAN Internet Protocol Address of the gateway router at the headend.

**Headend User Name:** The user name for FTP and Telnet access for the headend. *The default is "adtec".*

**Headend Password:** The password for FTP and Telnet access for the headend. *The default is the word "none".*

**Auto Merge:** Auto Merge is the process for automatic schedule merging and verification unmerging. *The default setting is No.* If you wish to begin adding a headend that is not fully functional and want to avoid alarm activity, we suggest setting the Auto Merge to no until the headend is up and running.

**File Name Length:** The length of the ad copy file name. As part of the auto merge feature, schedule files are parsed in three formats.

**20/20:** 6 characters, right-justified, leading zeros  
Ex. 00000123456 = 123456

**Novar:** 8 characters, right-justified, leading zeros  
Ex. Novar typically comes in as 11 characters which has leading zeros (00012345678 = 12345678)

**Non-zero:** variable length (max = 8), left-justified, trailing spaces  
Ex. "01234 " = 01234

**Full Name:** The full 11 character file name specified in the CCMS schedule is used. (DPI applications only.)

Once you have added a headend it is possible to edit or delete that headend by browsing to Configuration > Headend and selecting either Edit or Delete to proceed.

---

**Note:** If you delete a headend, all channels assigned to that headend will be deleted as well.

---

With a headend in place, you may begin adding channels.

## Channel Setup

To add a channel, browse the navigation menu to Configuration > Channel > Add a Channel. (Fig. 2.3) You must select a headend to add channels to. Single click on the desired headend. You will see the Headend ID number appear at the top of the page. Complete the following fields to add a channel to that headend.

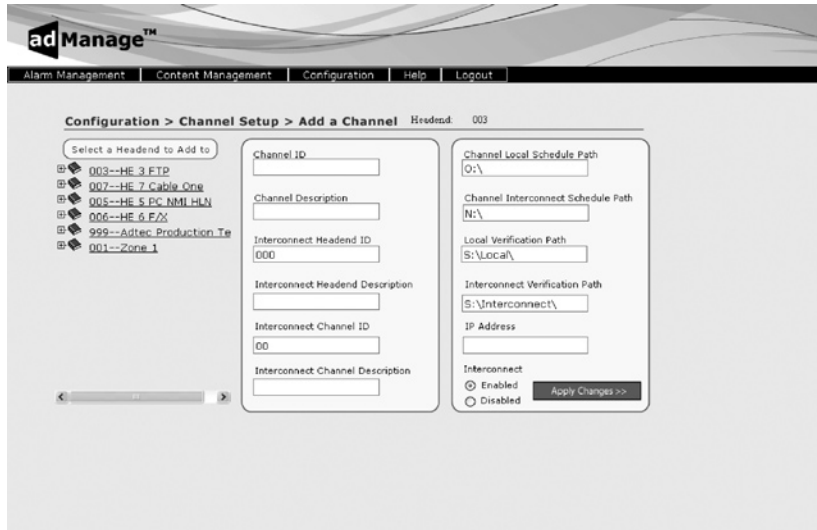


Figure 2.3

The following fields are required for Channel Setup.

**Channel ID:** A two digit identifier. This number is identified in the schedule file name from your traffic and billing system. It will be a value from 01-99. To locate this value, you can refer to the file name structure of your schedules using MDDCCHHH.SCH. The number represented by CC is your Channel ID.

**Channel Description:** Description of the channel. You are limited to 255 characters. The channel description should match the Duet unit name which is limited to 4 characters.

**Interconnect Headend ID:** The three digit identifier that is logically associated to the Interconnect schedules for a given provider. It is identified in the file name structure of the Interconnect schedules using MDDCCHHH.SCH. The number represented by HHH is your Interconnect headend ID.

**Interconnect Headend Description:** A description for the Interconnect provider. ( ex. Headend 3 )

**Interconnect Channel ID:** The two digit identifier of the Interconnect

channel. It is identified in the file name structure of the Interconnect schedules using MDDCCHHH.SCH. The number represented by CC is your Interconnect channel ID.

**Interconnect Channel Description:** A description for the Interconnect channel. ( ex. ESPN )

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Note: When editing or entering a path as part of the channel setup, you must use a trailing backslash " \ "

---

**Channel Local Schedule Path:** The source folder for local unmerged schedules. *The default location on the TBGS is: C:\TBGS\LocalSchedules\.*

**Channel Interconnect Schedule Path:** The source folder for Interconnect unmerged schedules. *The default location on the TBGS is: C:\TBGS\InterconnectSchedules\.*

**Local Verification Path:** The location where the unmerge service places the local verification files pulled from the ad inserters. These files are sent back to your traffic and billing system. *The default location on the TBGS is: C:\TBGS\Verifications\Local\.*

**Interconnect Verification Path:** The location where the unmerge service places the Interconnect verification files pulled from the ad inserters. These files are sent back to your Interconnect provider. *The default location is: C:\TBGS\Verifications\Interconnect\.*

**IP Address:** The IP address of the channel. Each channel has a unique IPA.

**Interconnect - Enable/Disable:** Select enable if using Interconnect schedules and verifications. Select disable if **ONLY** using local schedules and verifications.

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Note: Disabling the Interconnect prior to applying changes will remove any values you have entered for Interconnect Headend ID, Interconnect Headend Description, Interconnect Channel ID, Interconnect Description ID, Channel Interconnect Schedule Path and Interconnect Verification Path.

---

Once you have added a channel it is possible to edit or delete that channel by browsing to Configuration > Channel and selecting either Edit or Delete to proceed. As channels are added, they are listed under the specified headend. Each channel screen provides a headend tree view on the left side of the screen.

## System Configuration

To modify the default system configuration of adManage, you will need to be an Administrator. Login and browse to Configuration > System. (Fig. 2.4)

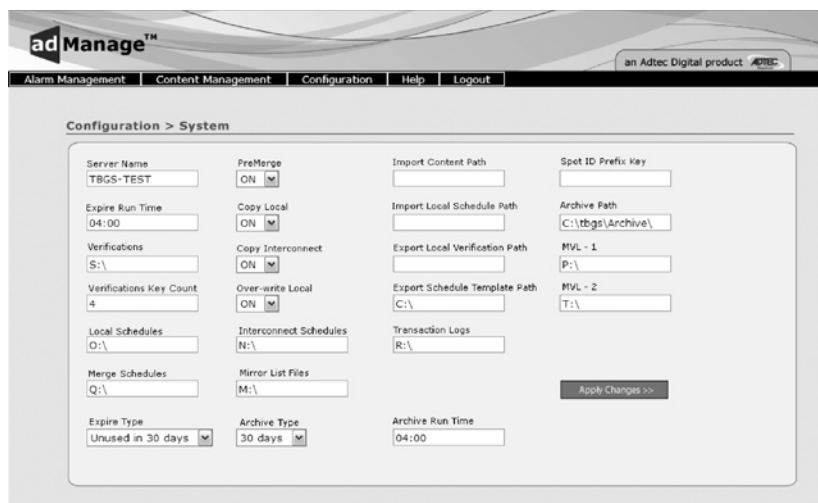


Figure 2.4

**Server Name:** The TBGS server name. You can locate this by right-clicking on the My Computer icon of the TBGS and selecting Properties. Select the "Computer Name" tab and look for the "Full Computer Name" field. This value is the server name.

### Expiration Variables

These variables assist in maximizing the use of available disk space on each ad inserter.

**Expire Run Time:** The daily run time for the Content Service. This is written in 24 hour format (ex. 13:32) **The recommended setting is '04:00' which will run at 4:00am each morning.**

**Expire Type:** This field defines which criteria to use when moving content to the expired list. You can select one of the given variables (Unused in 30,60,90 or 180 days) or you can select to only use the content expire time. **The recommended setting is 'Unused in 60 days'.** This setting places commercials not used in the last 60 days or expiration dates which have been exceeded and are not in the Evergreen section into the Expired List. The Expired List is provided on the on the Content Management > Purge or the Content Management > System MVL pages.

### Content Archiving Variables

Content archiving is an automated process which moves old local schedules, merged schedules and verifications to an archive folder on the TBGS. This saves the files in case they are needed and also removes the files from the active folder to prevent conflicts during the next calendar year. These setting will be used for this automated process.

**Archive Path:** The location of media that has been user-defined as archived media. To designate media as archived, you must be an Administrator or Standard User. *The default is: C:\tbgs\Archive\*

**Archive Type:** This setting defines the number of days that will pass prior to archiving. **The recommended setting is '60 Days'.** This removes schedules and verifications older than 60 days from the active folder to the archive folder.

**Archive Run Time:** The daily run time for archiving. This is written in 24 hour format (ex. 13:32) **The recommended setting is '03:00' which will run at 3:00am each morning.**

### Pre Merge Variables

Pre Merge is an optional service of adManage that allows for local and Interconnect schedules to be loaded prior to running the Merger Service. The process creates schedule templates in the form of Interconnect schedules to be used by the merging service. These fields configure this service.

**Pre Merge:** The On/Off selection for the Pre Merge Service. **The recommended setting is 'Off'.**

**Copy Local:** Allows you to turn on/off copying of local schedules even if the Interconnect schedules are missing. **The recommended setting is 'On'.**

**Copy Interconnect:** Allows you to turn on/off copying of Interconnect schedules even if the local schedules are missing. **The recommended setting is 'On'.**

**Import Content Path:** The location of the source media or ad copy for the Pre-Merge Service. *The default location on the TBGS is C:\TBGS\ITContent\.* **The recommended setting is to leave this blank unless interconnect is being used.**

**Import Local Schedule Path:** The location of source local schedules for the Pre-Merge Service. **The recommended setting is to leave it blank.**

**Over-write Local:** This feature handles any scheduling conflicts that may occur when merging local and Interconnect schedules. Enabling this feature gives Interconnect scheduled content priority while disabling it gives local scheduled content priority. **The recommended setting is OFF unless interconnect is being used.**

**Spot ID Prefix Key:** This is used by the Pre Merge service to rename ad files names to match the eight character naming scheme used in the CCMS schedule. (See Appendix D for details on the CCMS Schedule) **The recommended setting is to leave this blank unless interconnect is being used.**

**Export Schedule Template Path:** The location of the pre merge templates. **The recommended setting is to leave this blank unless interconnect is being used.**

### **Default Paths**

These paths are the default locations for the files used by adManage.

---

Note: When editing or entering a path as part of the system configuration, you must use a trailing backslash " \"

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**Local Schedules:** The location of the raw unmerged local schedules. This location is used by the Merger Service as the source for all local schedules.  
*The default is: C:\tbgs\LocalSchedules\*

**Verifications:** The location of the verification files received from the ad inserters after they have been processed by the Unmerge Service. They are used for verifying inserted content and are retrieved by your traffic and billing service.  
*The default is: C:\tbgs\Verifications\*

**Verification Key Count:** This is the total number of days to allow eyeMonitor to view verifications. (Includes current day.) **The recommended setting is '7'.**

**Interconnect Schedules:** The location of the raw unmerged Interconnect schedules. This location is used by the Merger Service to merge local and Interconnect schedules.  
*The default is: C:\tbgs\InterconnectSchedules\*

**Merged Schedules:** The location for the merged schedules ready for deployment to the ad inserters. These files are placed in this directory by the Merger Service. They are merged schedules that include local and Interconnect schedules.  
*The default is: C:\tbgs\MergedSchedules\*

**Import Local Schedule Path:** The source path to obtain local schedules for the TBGS. **The recommended setting is to leave this field blank and to place your local schedules directly into the C:\tbgs\LocalSchedules\ folder.**

**Export Local Verification Path:** The destination path to an independent server where local verifications are placed for further processing. It is used by ITVerificationPreparationService. **The recommended setting is to leave this blank and retrieve the Local verifications directly from c:\TBGS\Verifications\Local\.**

**Transaction Logs:** The location of the RDY and LOG files received from the ad inserters.  
*The default is: C:\tbgs\TransactionLogs\*

**Mirror List File:** A mirror list file is a .MVL file created by adMange that specifies the exact media contents to be held in each ad inserter within a headend. These files are used by the solicitor unit at each headend for scheduling, verification and media delivery.  
*The default is: C:\tbgs\MirrorListFiles\*

**MVL - 1 :** The location of the local MPEG files to be deployed to the ad inserters. It is used to store content for current and future distribution.  
*The default is: C:\TBGS\MasterVideoLibrary\*

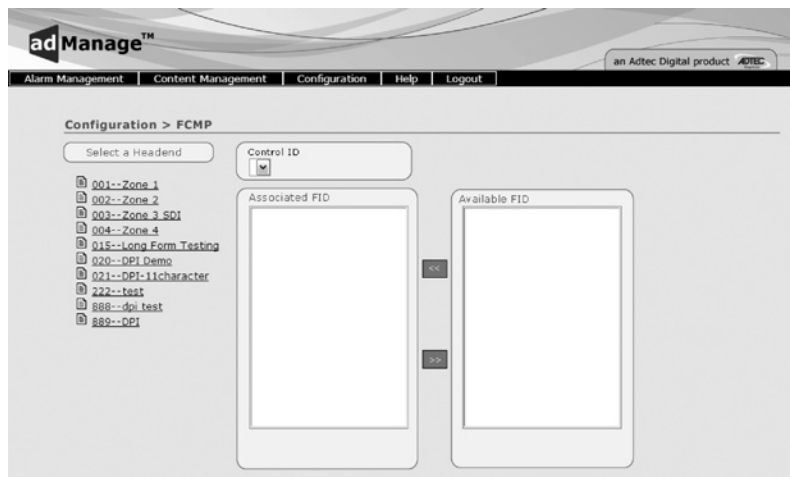
**MVL - 2 :** The location of the Interconnect MPEG files to be deployed to the ad inserters. It is used to store content for current and future distribution. This can be used for DPI ready encoded files as well.  
*The default is: C:\TBGS\MasterVideoLibrary2\*

## FCMP

### FCMP

The configuration of FCMP is used when a FCMP server exists as a part of the TBGS system. FCMP is an IP address satellite delivery system. It is used to distribute the media, MVLs, and schedules to each headend. Current and future schedules are used as a reference for a basic delivery list. Comparing the basic delivery list to the RDY retrieved by autoDialer, the Delivery service creates a true delivery list of required files for each site. Once the delivery list is created, the FCMP server will deliver this content directly to each edgeL. The edgeL in turn EMTs the media and pass-throughs the MVL and schedules to the duets at the headend.

To modify the FCMP configuration of a headend, browse to Configuration > FCMP . (Figure 2.5)



The following fields are available for FCMP.

**Select Headend:** You must select a headend to assign a FID (FCMP ID) to. Single click on the desired headend. Complete the following fields to configure the FCMP setup for that headend.

**Control ID:** Select from the available options to specify the FCMP structure you are configuring. (FCMP structures are defined and created by the FCMP setup wizard)

**Associated FID:** The FCMP IDs already associated with that headend.

**Available FID:** The FCMP IDs available to the system.

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## Chapter 3 - Using adManage

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### TBGS Server and adManage Services

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#### **Alarm Service:**

The Alarm Service notifies the adManage users of system status, critical problems and errors. Users are emailed or paged with alarms as they are detected according to the rules configured in adManage. Refer to the Alarm Management portion of this manual for a complete list of alarms and troubleshooting assistance.

#### **File Backup Service:**

The file backup service will archive content as configured in adManage.

#### **Content Service:**

The optional Content Expirations Service helps maximize the use of available disk space on each ad inserter. This service runs once a day, at a user defined time, to update the database concerning content expiration. At the time the service runs, any spot that is 1 – 3 days old, and is not used in today's schedule or any loaded future schedule, is listed as expired in the database. This information is used by the MVL Service to update the content expiration list in the MVL file.

#### **Merger Service:**

The Merger Service automates the handling of schedules in a local and/or interconnect environment. Schedules from each traffic and billing program are placed in the appropriate directory on the TBGS (C:\TBGS\LocalSchedules\ for local schedules and C:\TBGS\InterconnectSchedules\ for Interconnect schedules.) The Merger Service is constantly searching for new schedules throughout the day. New schedules are located by comparing the Time/Date Stamps of each file. When new schedules are found, they are merged and placed in the merged schedules directory C:\TBGS\MergedSchedules\. Each ad inserter periodically checks the merged schedules directory for new files, and loads or re-loads the file as needed. If the Merger Service finds a schedule break conflict while merging, the Alarm Service is notified. adManage users will then be notified according to the rules setup in the Alarm Management section of adManage. If either the Local or Interconnect schedule is missing, the Merger Service will move the existing file into the merged schedules directory for loading. If the missing file appears later, it will be merged and moved to the merged schedules directory based on the date/time stamp of the file.

#### **MVL Service:**

The MVL Service automates the distribution of ad copy and schedules. The MVL file, or Mirror List File, is created by the adManage MVL Service. This file contains a list of all required ad copy for the current day and up to seven days forward for all networks in each headend. This file also stores the content expiration list. Only the Solicitor of each headend uses the MVL file to pull content from the TBGS. After retrieving ad copy from the TBGS, each Solicitor uses Adtec's Ethernet Multicast Transfer protocol to quickly transmit all spots to all units in that headend, making them available to all channels. Each time an inserter receives an updated MVL file, it will delete all spots listed as expired. The spots remain on the TBGS in case they are needed in the future.

#### **RDY Service:**

The RDY Service processes the .RDY Ready File created and returned by each ad inserter.

The RDY file reports all loaded schedules, missing ad copy, additional "unmanaged" ad copy and storage status of each ad inserter. From Ready files, the RDY Service is able to report accurately the content at each headend compared to the original .MVL file.

#### **UnMerger Service:**

The UnMerger Service automates the verification process in an environment where Interconnect and local schedules exist. As verification files are received by TBGS from the ad inserters, the UnMerger Service separates the Interconnect and Local verification records and writes them to the appropriate file and directory (C:\TBGS\Verifications\Local\ for local verifications and C:\TBGS\Verifications\Interconnect\ for Interconnect verifications.)

### Scheduling

---

#### **Ad Copy:**

Local ads are encoded and copied into the MVL directory on the TBGS (C:\TBGS\MasterVideoLibrary\). Interconnect ads are copied to the MVL2 folder. (C:\TBGS\MasterVdeoLibrary2\). Ads which are certified as DPI ready should be copied into the MVL2 folder.

#### **Local Schedules:**

Local Schedules are CCMS compatible .SCH files that are created and stored locally. They contain a daily (24 hour) list of ad copy scheduled to run on a specific headend channel. See Appendix D for the CCMS Schedule Format. As these files are loaded into the local schedule directory (*The default directory is C:\TBGS\LocalSchedules\*) the TBGS creates a list of required ad copy for each site using the MVL



and Merger Services.

### Interconnect Schedules:

Interconnect Schedules are CCMS compatible .SCH files provided by an Interconnect provider. They contain a daily (24 hour) list of ad copy scheduled to run on a specific headend channel. As these files are loaded into the Interconnect schedule directory (*The default directory is C:\TBGS\InterconnectSchedules\*) the TBGS creates a list of required ad copy for each site using the MVL and Merger Services.

### Merging Schedules:

Schedule merging is an automated service which handles the schedules from a local or Interconnect environment. The Merger Service runs behind the scenes once enabled. To enable merging, you will need to set the Auto Merge setting to enable on the Configuration > System page of adManage.

### Verifications:

Verification files (.VER) are mirror 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. After each avail, the ad inserter will send back the verification file to the TBGS so that it can be processed by the UnMerger Service before being placed in the appropriate directory. (See Appendix E for explanation of Verification Status Codes)

### Ready Files:

Ready files (.RDY) files are created by the ad inserter which specifies any missing content requested by a specific .MVL file. It also reports any file located on the ad inserter that is unmanaged. These files are used by the Alarm Service of adManage to monitor and distribute alarms.

### MVL Files:

The MVL file, or Mirror List File, is created by the adManage MVL Service. This file contains a list of all required ad copy for the current day and up to seven days forward for all networks in each headend. This file also stores the content expiration list.

## Content Management

The Content Management functionality of adManage allows centralized control of your commercial insertion system. This includes the TBGS server, adManage, eyeMonitor, and any ad inserter. A complete illustration of Adtec's adVantage Ad Insertion Solution is found in Appendix B.

### Missing:

Once you have logged into adManage, you will see that the initial screen is the Missing Content page. You can also navigate to it through Content Management > Missing (Figure 3.1)

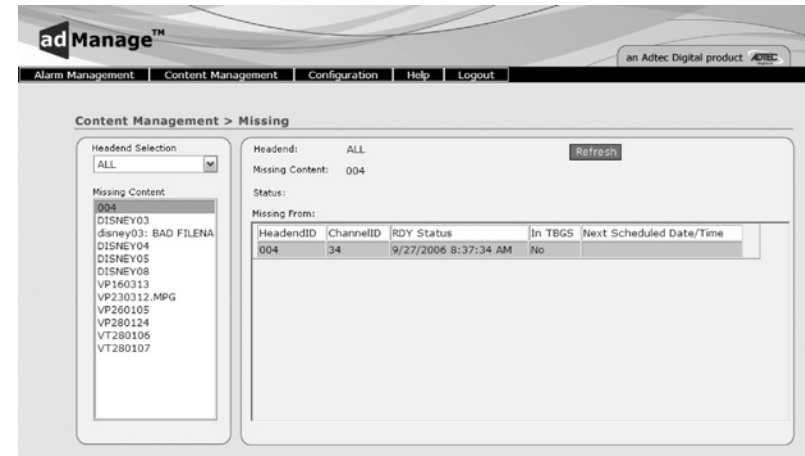


Figure 3.1

The Missing Content section lists any media or schedule file marked as missing by the ad inserter RDY file. RDY files are created by the ad inserters and reported back to adManage typically every 10 minutes. You can sort through missing content by limiting the missing content to a specific headend and a specific file.

Single click on one of the headends listed in the Headend Selection list. Doing so will populate the Missing Content list box with all of the missing content specific to that headend.

Once you highlight a specific file in the missing content list box, the right panel grid will populate with the data specific to that file. Above the grid, you will be given the headend information, a short description of the missing content, the status of the content and the location that it is missing from. The Missing From grid will display: the headend and channel of the missing content, the file name of the RDY file that reported it missing as well as the date/time stamp of that RDY file. It also reports whether or not the file is physically located on the TBGS and what the scheduling specifics are for the missing file.

### Drive Status:

Drive Status is located at Content Management > Drive Status (Fig 3.2)

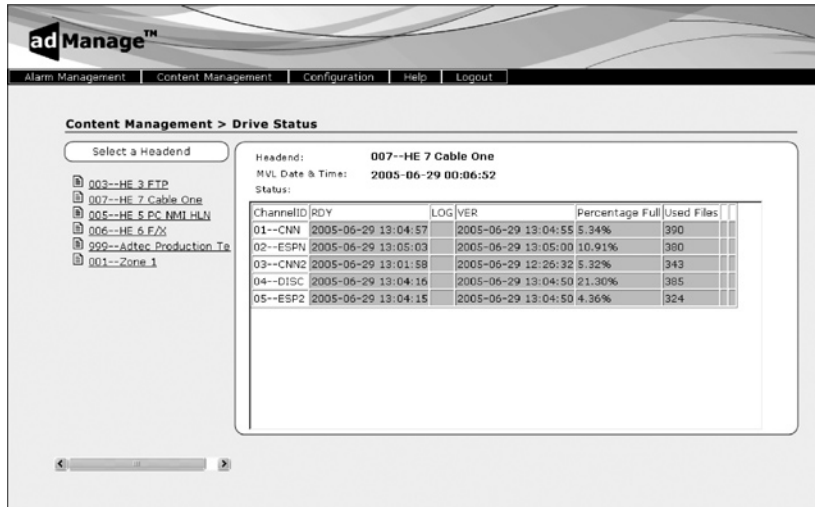


Figure 3.2

The Drive Status section provides drive status information on each ad inserter that is part of the system. By selecting a headend from the left panel of this screen, you can view the status of all inserters at that headend. Each inserter is listed separately and you are given the following stats on each;

- The most recent .MVL file date/time stamp
- Status
- Channel ID
- The most recent .RDY file date/time stamp
- The most recent .VER file date/time stamp
- The percentage of the drive filled
- The number of files in use

Having access to this data allows you to monitor disk usage information and help identify storage management issues. This data is also available via the Run Rate Report Alarm.

### Purge:

Purge is located at Content Management > Purge (Fig 3.3)



Figure 3.3

The process provided by the Purge section allows further content management by marking files for deletion at the selected headend. Files which can be purged are either unscheduled or expired. Unscheduled files are commercials which are not on any schedule for the headend. Exercise caution in purging unscheduled content because it could be needed in the future.

adManage will suggest content which has either expired by date or has not been used in a while for deletion. Note that purging files is intentionally not automatic, you must review the expired list and select which content you want to be purged. Unscheduled files are not in the schedule list yet remain in the headend .MVL file.

Moving files from one of these lists to the purge list marks that file "to be deleted" at that headend. To move these files, highlight them and single-click on the double right arrow next to the corresponding box. You will notice that the file is not immediately removed. Once the .MVL file is compiled again for this headend the file will be removed. Checks are performed constantly throughout the day to see if a new MVL file needs to be created.

If you find that you have mistakenly marked a file for purge, you can remove it from the purge list by clicking on any left double arrow button.

---

If you do not manage the content of the ad inserters, they will hold excessive unmanaged content which will slow all reporting functions down.

### Evergreen:

Evergreen is located at Content Management > Evergreen (Fig 3.4)

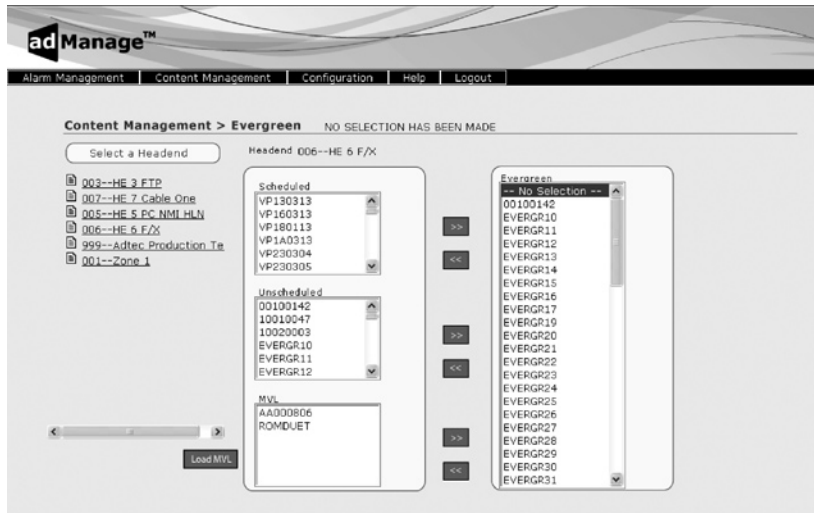


Figure 3.4

adManage enables you to specify files as evergreen per headend. These files become a permanent part of the MVL file for the headend until it is removed by the user. This feature is useful with content that is frequently used.

To designate material as evergreen, single-click on the headend you wish to evergreen material for. You will see the headend name appear at the top of the page. The types of files on this headend are separated into three categories; Scheduled, UnScheduled and MVL. Scheduled files include all files scheduled for today through 14 days. Unscheduled files are not in the schedule list yet remain in the headend MVL. MVL files are all files listed in the MVL. To view the MVL files, you will need to load the MVL by clicking on the "Load MVL" button to the left of the MVL list box. It may take some time to load in all the file names depending on the number of files in that folder.

To designate any of these files as evergreen, highlight them in the list box and single-click on the corresponding right double arrow to move them to the evergreen list.

If you find that you have mistakenly marked a file for evergreen, you can remove it from the evergreen list by clicking on any left double arrow button.

---

Note: You must remove an item from the evergreen list before it can be purged.

---

### System MVL:

System MVL is located at Content Management > System MVL (Fig 3.5)

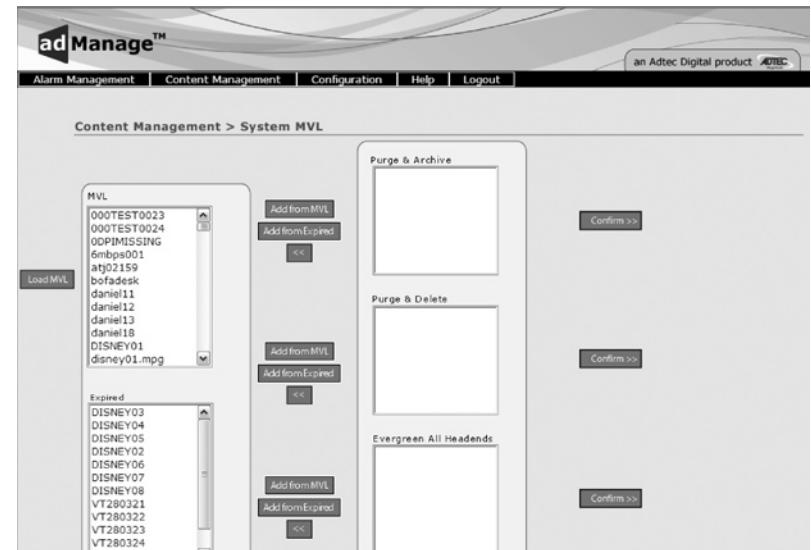


Figure 3.5

The System MVL section of the application assists you in managing the System Master Video Library. This library is typically held on the TBGS. To view the files in the library, you will need to load the MVL by clicking on the "Load MVL" button. The secondary box, labeled 'Expired', contains all of content which has exceeded the expiration date (or optionally has been unused for a configured period of time - 30, 60, 90, 180 days). This interface allows you to complete three types of processes regarding Expired content and the MVL.

You can Purge & Archive a file which will mark the file for removal from all headends and place it in the archive folder on your TBGS.

You can Purge & Delete a file which will mark the file for removal from all headends and delete it from the TBGS.

Finally, you can Evergreen the file for all Headends. This will add the file name to the MVL for all headends that are part of the system. Evergreen material becomes permanent for the headend until it is removed from the evergreen list.

For each of these actions, you will need to confirm by clicking on the "confirm" button. Each action must be completed separately.

## Alarm Management

### Alarm Status:

To view the current alarms, browse to Alarm Management > Alarm Status (Fig. 3.6)

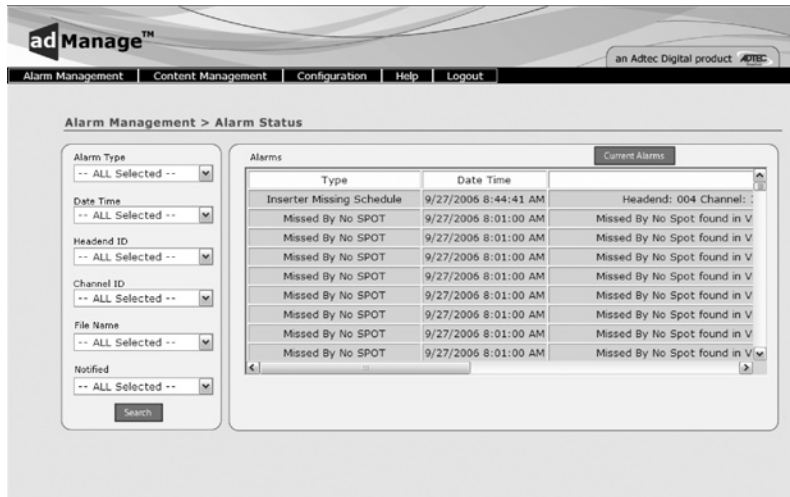


Figure 3.6

To view all alarms that have registered in the past hour, click on the "Current Alarms" button located at the top of the alarm grid. Alarm Status gives you the ability to narrow the results for alarms using the following criteria; Type, Date/Time, Headend ID, Channel ID, File Name, and Notification Status.

There are 19 types of alarms. Refer to the following chart for status and troubleshooting assistance.

## Suggested Use for Alarm Rules

### Merge

**Description:** Merge occurred - Status Only

**Suggested use:** This alarm is used to notify that the Local schedules have been placed into the Merged Schedules folder via the Merger Service. Use this for confirmation that new/updated schedules have been moved to the merged schedule folder. This process must happen in order for the Duets to see your new/updated schedules. After you assign this alarm to a user, it will take 5 – 10 minutes after loading the schedules from your traffic software to receive an alarm. If you do not receive this status alarm and new schedules have been made

or updated, please move to troubleshooting procedures. This Alarm would be useful for any traffic personnel wanting confirmation of the movement of new/updated schedules, which is a necessity for the Duets to retrieve them.

### Merge Conflict

**Description:** Merge conflict occurred - Local and interconnect spots are scheduled for the same avail time.

**Suggested use:** This alarm is used only in an interconnect environment, to notify of a conflict when merging the two schedules together. This alarm will be sent out in situations where scheduled breaks exists in both schedules. If this alarm is received, reference the schedule name in the alarm to troubleshoot your conflict. This Alarm would be useful for any traffic personnel.

### UnMerge

**Description:** UnMerge occurred - Status Only

**Suggested use:** This alarm will notify that verifications have been unmerged and are ready for billing. This Alarm would be useful for any traffic personnel ready to bill the previous day.

### Not Checked-In (\*Highly Recommended Alarm\*)

**Description:** Channel has not checked-in - The ad inserter has not reported back an RDY file in the past hour, most likely caused by a communication problem/interruption.

**Suggested use:** This alarm is used to notify that a Duet has not logged into the TBGS in the past hour. Communication to the Duet must be investigated and re-established if need be. The Duet must be able to login to retrieve schedules and place verifications. This alarm should be used and monitored to ensure constant/consistent communication to the TBGS. This alarm would be useful for anyone managing Duets at the headend and any IT specialist.

## **Check-In**

---

**Description:** Channel checked-in - Status Only

**Suggested use:** This status alarm is used to notify that a Duet has logged into the TBGS in the past hour. This can be used to confirm a Duet(s) network health in the field. You can use this alarm for a particular channel for troubleshooting. This alarm would be useful for anyone managing Duets at the headend and any IT specialist . Because under normal operation a lot of traffic will be generated by this alarm, it is better to use the Not Check In alarm for exception management.

## **Obtained Schedule**

---

**Description:** Channel obtained schedule - Status Only

**Suggested use:** This status alarm is used to notify that a Duet has obtained a schedule from the TBGS. This can be used to confirm a Duet(s) has retrieved a new or updated schedule. This alarm could be used to ensure transfer of schedules from the Merged Schedules folder to the Duets in the field. Because under normal operation a lot of traffic will be generated by this alarm, it is better to use the Missing Schedule alarm for exception management.

## **Missing Schedule (\*Highly Recommended Alarm\*)**

---

**Description:** Channel missing schedule - The ad inserter is missing a schedule.

**Suggested use:** This alarm is used to notify that a Duet(s) is missing a schedule for today or the future. This alarm can be used to confirm all future schedules are on the inserters. This Alarm would be useful for any traffic personnel.

## **Obtained Content**

---

**Description:** Channel obtained content - Status Only

**Suggested use:** This status alarm is used to notify of all or particular content being retrieved by the inserters. This alarm is helpful in confirming the transferring of new content to the inserters. This status alarm would be useful for any traffic personnel.

## **Missing Content (\*Highly Recommended Alarm\*)**

---

**Description:** Channel missing content - The ad inserter is missing commercials which are scheduled to play. Missing content is caused by communication problems or the spots have not been ingested yet.

**Suggested use:** This alarm is used to notify of missing content on the ad inserters. This alarm is specific to content that is currently scheduled. This alarm would be useful for traffic personnel and production personnel. Please use the Server Missing Content alarm along with this alarm.

## **No Netset Cue (\*Highly Recommended Alarm\*)**

---

**Description:** Channel had no netset cue - The ad inserter did not receive a cue to insert the commercial during the scheduled avail. Typical causes could be DTMF tone a mismatch, schedule problems or cue issues with the broadcast network.

**Suggested use:** This alarm is used to notify of channels missing an insertion by no cue/tone. This alarm can be used to monitor for consistent missed by no cue occurrences. This alarm would be useful for all traffic personnel and anyone who manages Duets at the headend level.

## **Missed By No Break**

---

**Description:** Channel had a missed by no break - The unit is missing a schedule.

**Suggested use:** This alarm is used to notify of channels missing an insertion by no scheduled content for that break. This could be a scheduling error or a missing schedule all together. This would be an alarm which would require immediate investigation into the scheduling of the inserter or Duet itself. This alarm would be useful for all traffic personnel.

## **Missed by NO SPOT**

---

**Description:** Channel had a missed by no spot - Ad is missing from the commercial inserter. Refer to Missing Schedule Alarm and Missing Content Alarm.

**Suggested use:** This alarm is used to notify of channels missing an insertion by no spot/missing content. This alarm can be used to determine if missing content is at the headend or inserter level. This alarm would be useful for all traffic personnel.

### **Server Missing Content (\*Highly Recommended Alarm\*)**

**Description:** TBGS is missing content - Scheduled ads have not been ingested yet or placed in the Master Video Library on the MVL.

**Suggested use:** This alarm is used to notify of missing content from the Master Video Library. This specifically is related to currently scheduled content only. This alarm can be used for notification of encoding needs or file transfer duties. This alarm would be useful for all production personnel. If you are using the Adtec adCode media ingest station as part of your system setup, any missing content from the TBGS will automatically be listed within the adCode application.

### **Server Missing Local Schedules**

**Description:** Gateway is missing local schedules

- Local schedules have not been copied into the folder.
- Schedule file names have the wrong format.

**Suggested use:** This alarm is used to notify of missing schedules from the Local Schedules folder. The Local Schedules folder is where your traffic and billing software transfers to upon completion of new/updated schedules. This alarm can be used to notify that there is an inserter that hasn't been scheduled. This alarm would be useful for all traffic personnel.

### **Server Missing Interconnect Schedules**

Gateway is missing Interconnect schedule

- Interconnect schedules have not been copied into the folder.
- Schedule file names have the wrong format.

**Suggested use:** This alarm is used only in an interconnect environment to notify of missing schedules from the Interconnect Schedules folder. The Interconnect Schedules folder is where your traffic and billing software transfers to upon completion of new/updated schedules. This alarm can be used to notify that there is an inserter that hasn't been scheduled. This alarm would be useful for all traffic personnel.

### **Run Rate Report (\*Highly Recommended Alarm\*)**

**Description:** Run Rates of you headend - Produces a report for all current run rates at all currently configured headends

**Suggested use:** This status alarm will produce a report with percentages for every channel at every headend. The report will also note missing verifications as well. This report can be used by all departments for a snapshot of the run rates of your ad-insertion system. This status alarm would be useful for all personnel.

### **Service Status (\*Highly Recommended Alarm\*)**

**Description:** Service Status

**Suggested Use:** This alarm will be issued is there this a Gateway Service stop on the TBGS. All of the TBGS services are required to maintain consistent and correct data for other alarms, adManage, eyeMonitor, verification and schedule management processes. This alarm would be useful for any and all personnel who use the adVantage System.

## Alarm Rules:

To create alarm rules that can later be paired with users, you will need browse to Alarm Management > Rules > Add a Rule. (Fig. 3.7)

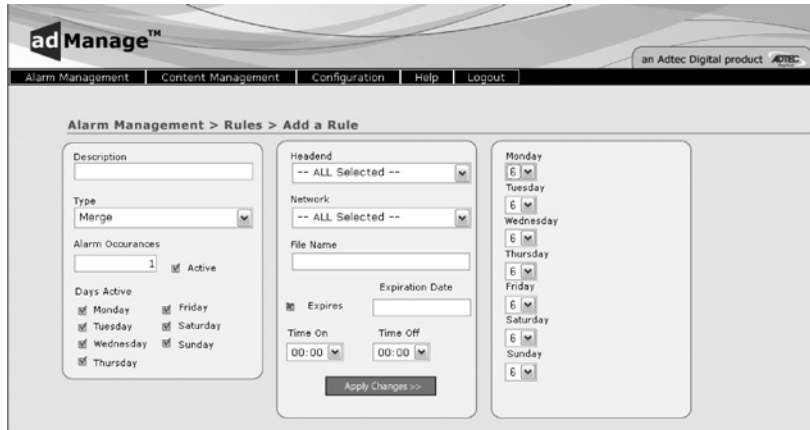


Figure 3.7

The following fields are available for each rule.

**Description:** Description for the Rule. You are limited to 255 characters

**Type:** Select the type of Alarm that applies to this rule. For a complete list of possible alarms and their meanings, refer to the previous pages.

**Alarm Occurrences:** Enter the number of times you want the alarm to occur before you are notified of this alarm.

**Active:** Activates or deactivates the rule.

**Days Active:** Select the days you want to the rule to be active.

**Headend:** Select the Headends that this rule applies to. You can select all headends or a specific headend.

**Network:** Select the Network/Channel that this rule applies to. You can select all networks/channels or a specific network/channel.

**File Name:** You can select a specific file per rule.

**Expires:** Indicates whether or not the rule expires on a certain date.

**Expiration Date:** The date that the rule expires ( Format YYYY-MM-DD)

**Time On:** Designate the time of day you want the rule active Format is 24 hour.

**Time Off:** Designate the time of day you do not want the rule active. Format is 24 hour. To specify 24 hour coverage for a rule, select 00:00 as the Time On and 00:00 as the Time Off.

**Day Selection:** Designate the number of days out to receive the alarm. For example, if the Missing Schedules Rule is set to 0, the alarm would only notify if the current day's schedule was missing, If it were set to 6, it would notify you of missing schedules for the current day through 6 days out.

Once you have added a rule it is possible to edit or delete that rule by browsing to Alarm Management > Rules and selecting either Edit or Delete to proceed.

### User Rule Assignment:

To assign alarm rules to system users, you will need browse to Alarm Management > User Rule (Fig. 3.8)

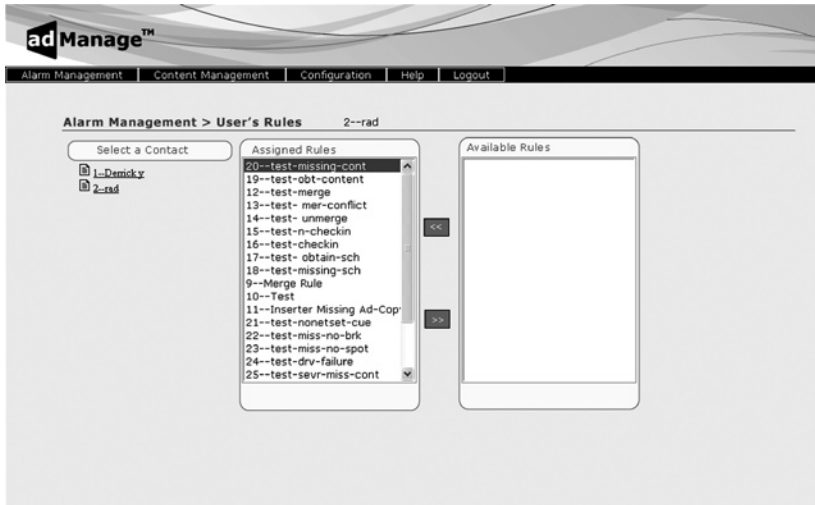


Figure 3.8

**Select a Contact:** You will need to select a contact or user to assign a rule to. You will see the user's name appear at the top of the screen.

**Assigned Rules:** The assigned rules panel will display all rules that have been assigned to this user.

**Available Rules:** The available rules panel will display a list of all rules available to the user.

To assign a rule to a user, highlight the user's name. Select the rule you wish to apply from the Available Rules list box and single-click on the double left arrow to place it in the Assigned Rules list box. To remove a rule, highlight the rule and single-click on the double right arrow to place it in the available rule box.

### Alarm Configuration:

To configure alarms, you will need browse to Alarm Management > Configuration. (Fig. 3.9)

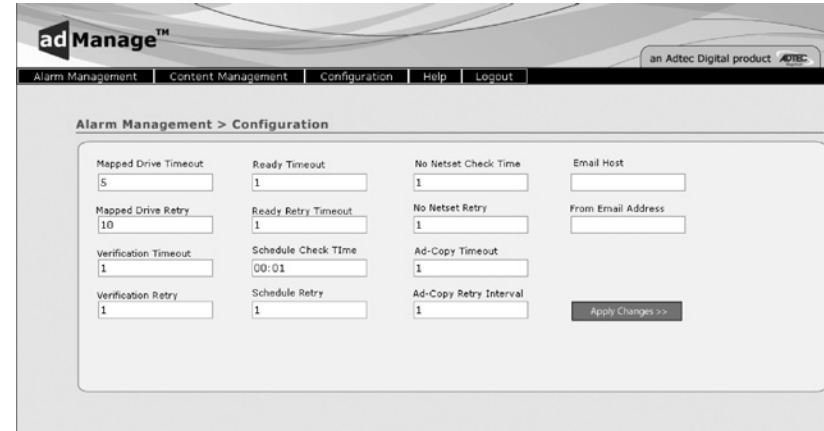


Figure 3.9

**Mapped Drive Time-out:** The frequency to check for mapped drive failures. Marked in minutes. **The recommended setting is '10'.**

**Mapped Drive Retry:** If a mapped drive failure is found, this designates how often to recheck for failure. Marked in minutes. **The recommended setting is '10'.**

**Verification Time-out:** The frequency to check for current verifications failures. Marked in hours. **The recommended setting is '1'.**

**Verification Retry:** If a verification failure is found, this designates how often to recheck to see if failure still exists. Marked in hours. **The recommended setting is '1'.**

**Ready Time-out:** The frequency to check for current RDY file failures. Marked in hours. **The recommended setting is '1'.**

**Ready Retry Time-out:** If a RDY file failure is found, this designates how often to recheck to see if failure still exists. Marked in hours. **The recommended setting is '1'.**

**Schedule Check Time:** The time to check for schedules to exist for next day. Format is 24 hour (ex. 16:00) **The recommended setting is '16:00'.**

**Schedule Retry:** If a schedule failure is found, this designates how often to



recheck to see if failure still exists. Marked in hours. **The recommended setting is '1'.**

**No NetSet Check Time:** The frequency to check for no netset cues. Marked in hours. **The recommended setting is '1'.**

**No NetSet Retry:** If a no netset failure is found, this designates how often to recheck to see if failure still exists. **The recommended setting is '1'.**

**Ad Copy Time-out:** The frequency to check for missing ad-copy. **The recommended setting is '1'.**

**Ad Copy Retry Interval:** If an ad copy failure is found, this designates how often to recheck to see if failure still exists. **The recommended setting is '1'.**

**Email Host:** The default email SMTP host to send alarm emails through as configured in each user profile.  
Example:mail.adtec.com

**From Email Address:** The email address from which emails will be sent.  
Example: NashvilleTBGS@adtecinc.com

## Chapter 4 - 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 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 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.

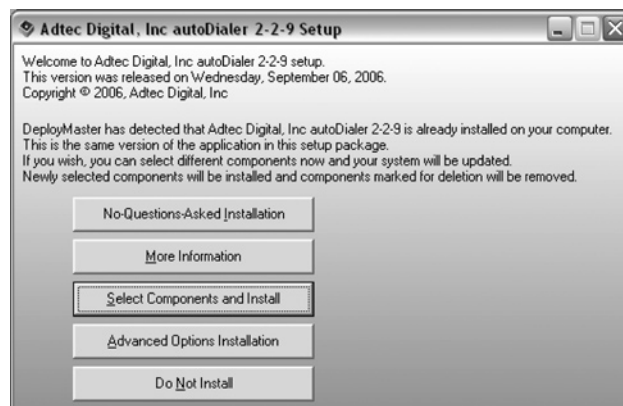


Figure 4.1

**No Questions Asked Installation** - This option will install autoDialer using default settings. (Recommended method of installation)

**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 4.2.

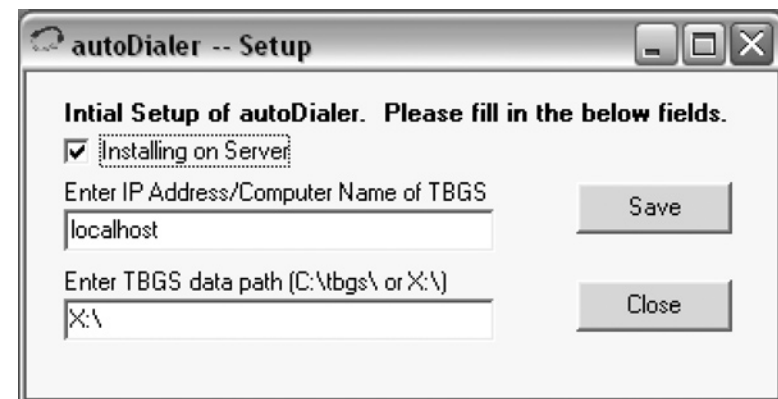


Figure 4.2

## 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.

## Configuration

---

To modify the autoDialer Program Configuration, browse to File > Configuration. (Figure 4.3)

---

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

---

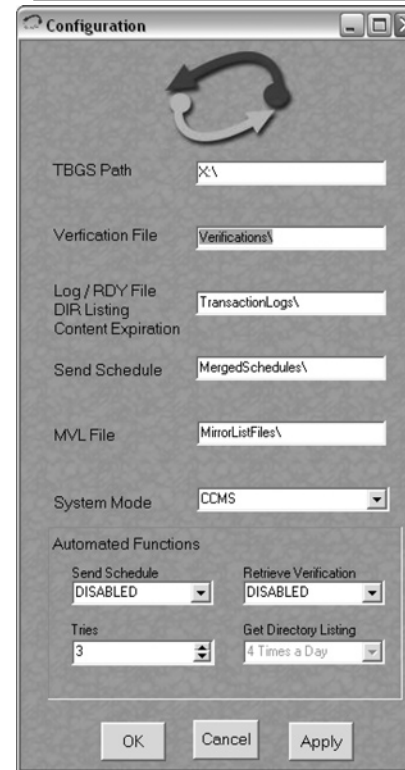


Figure 4.3

**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/reset 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 (figure 4.4) 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, autoDialer will use the configured dialup connection to the headend.

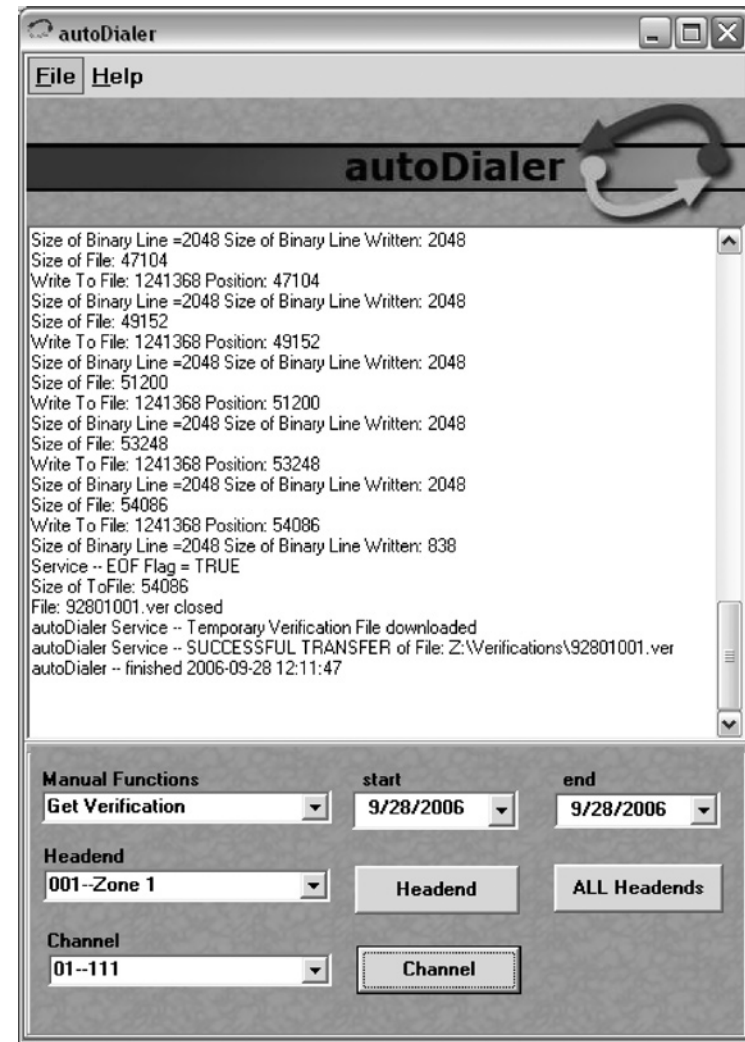


Figure 4.4

## 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.

## Appendix

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## 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. 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 guaranteed\*\* 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 guaranteed 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 guaranteed\* 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.



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## B - 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 FireWire™ 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

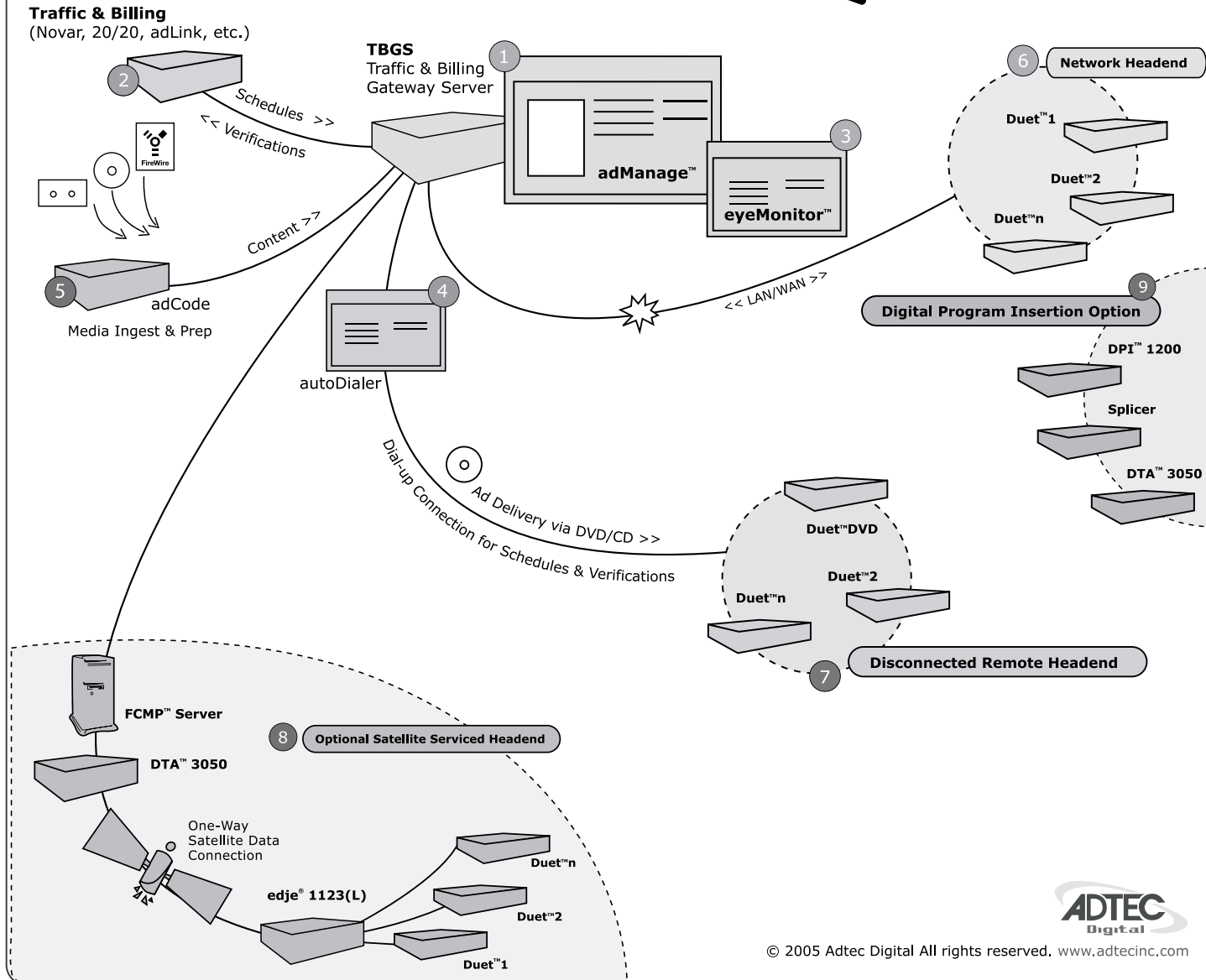
In headends without a network connection, media and data distribution can easily be achieved via satellite. Here's how it works. At the central office, adManage sends the media and schedules to Adtec's FCMP server which prepares the data by adding forward error correction then multicasting it to the Adtec DTA-3050 multiplexer for encapsulation and encrypting prior to the multicast uplink. At each satellite headend, an Adtec edge-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.

# adVantage

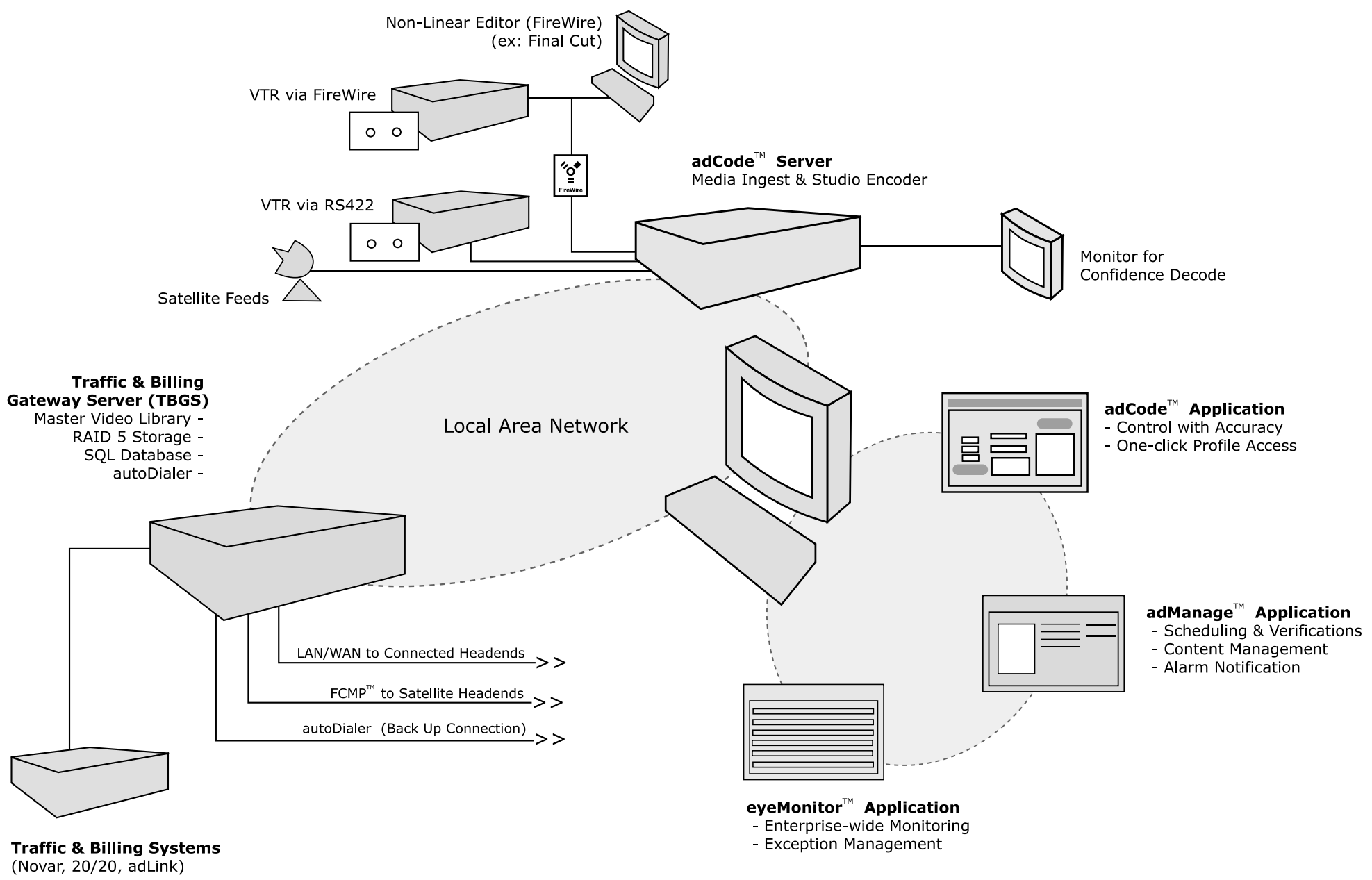
Enterprise Ad Insertion Solution



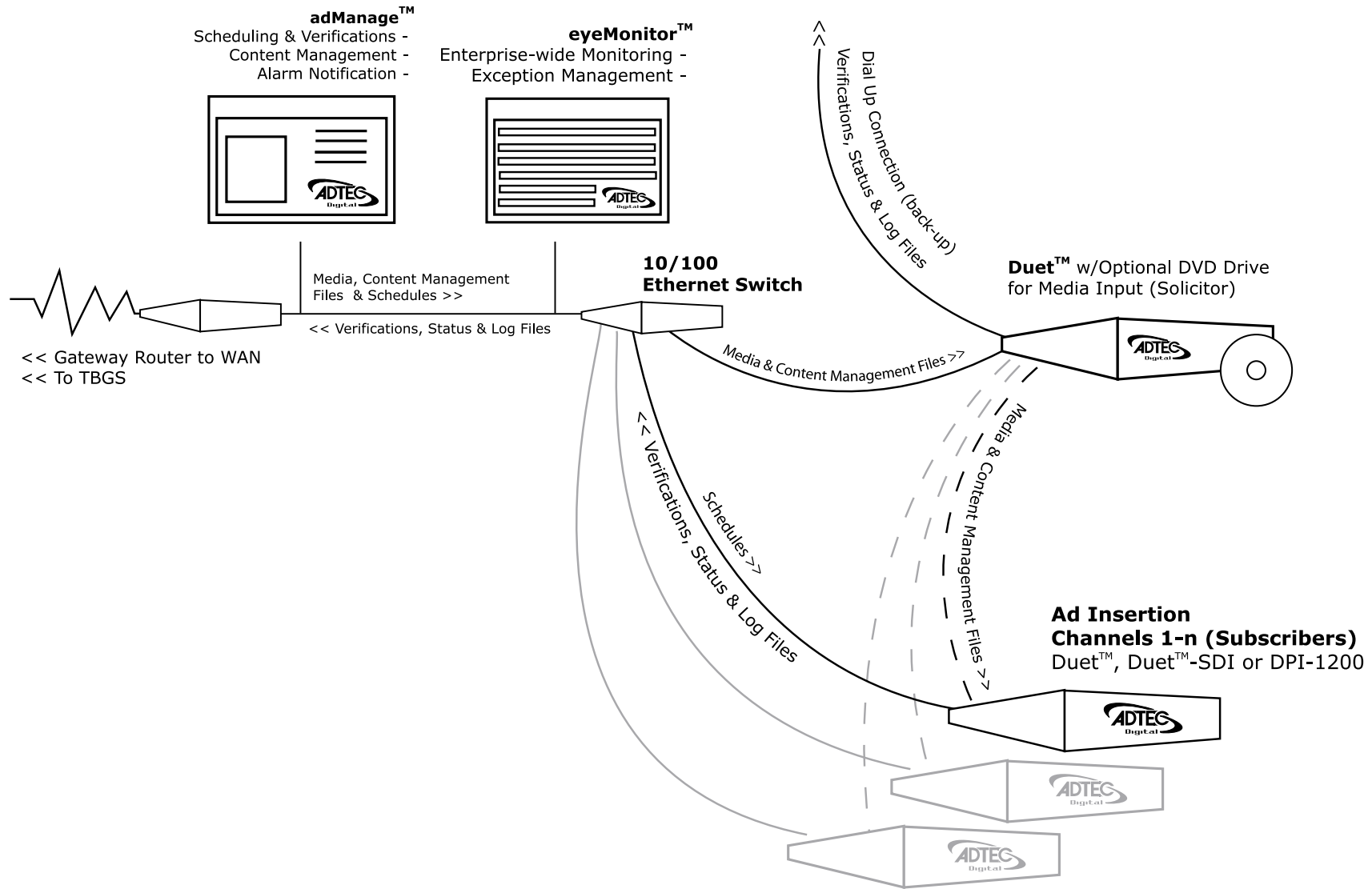
© 2005 Adtec Digital All rights reserved. www.adtecinc.com



**B1 - Traffic & Billing Central**



**B2** - Connected Headend

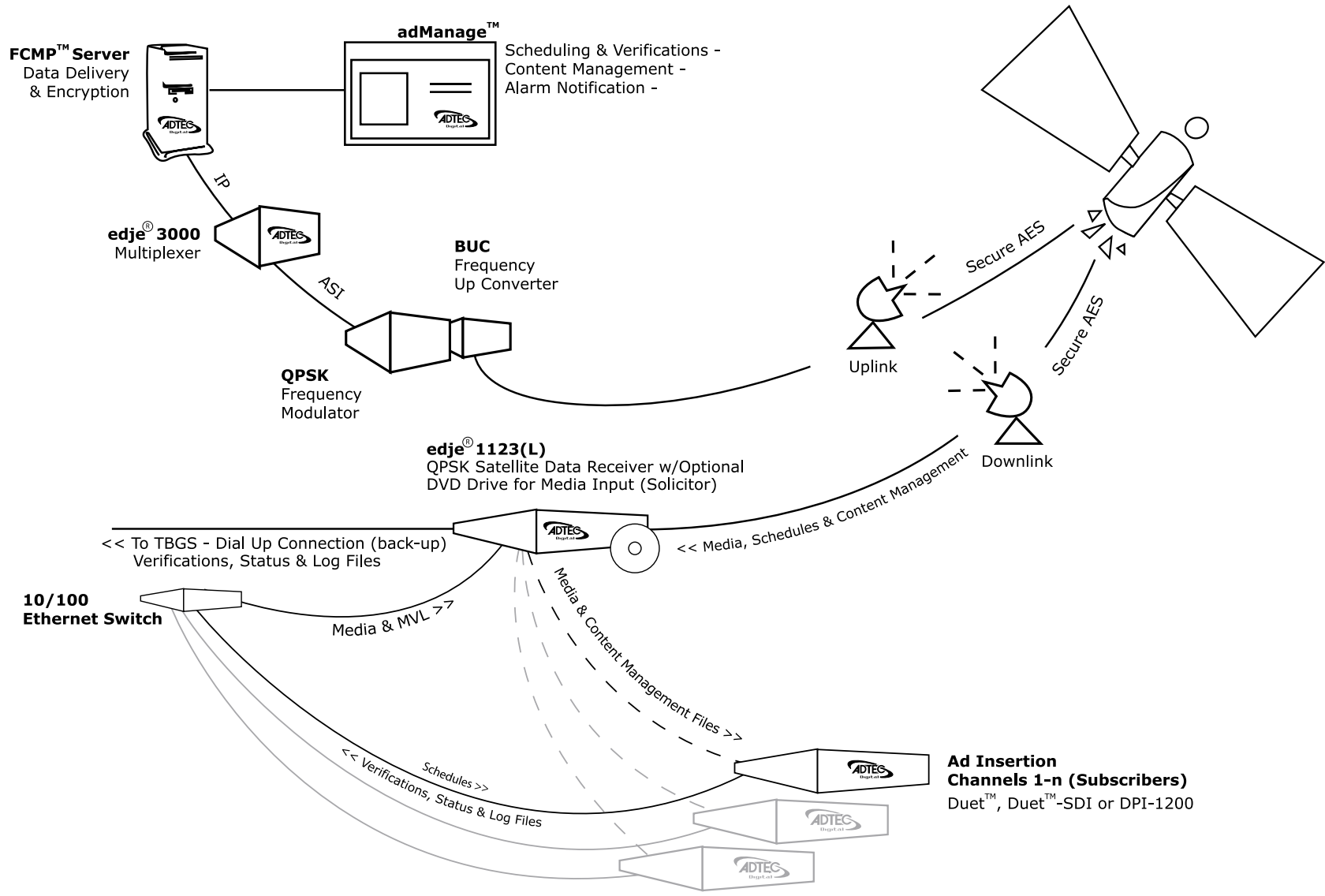


Adtec supports network connected headends through a LAN/WAN for delivery of media and commercial insertion schedules and central monitoring of status, verifications and content management. To minimize network traffic of large media files, the commercials and content

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.

**B3 - Satellite Serviced Headend**

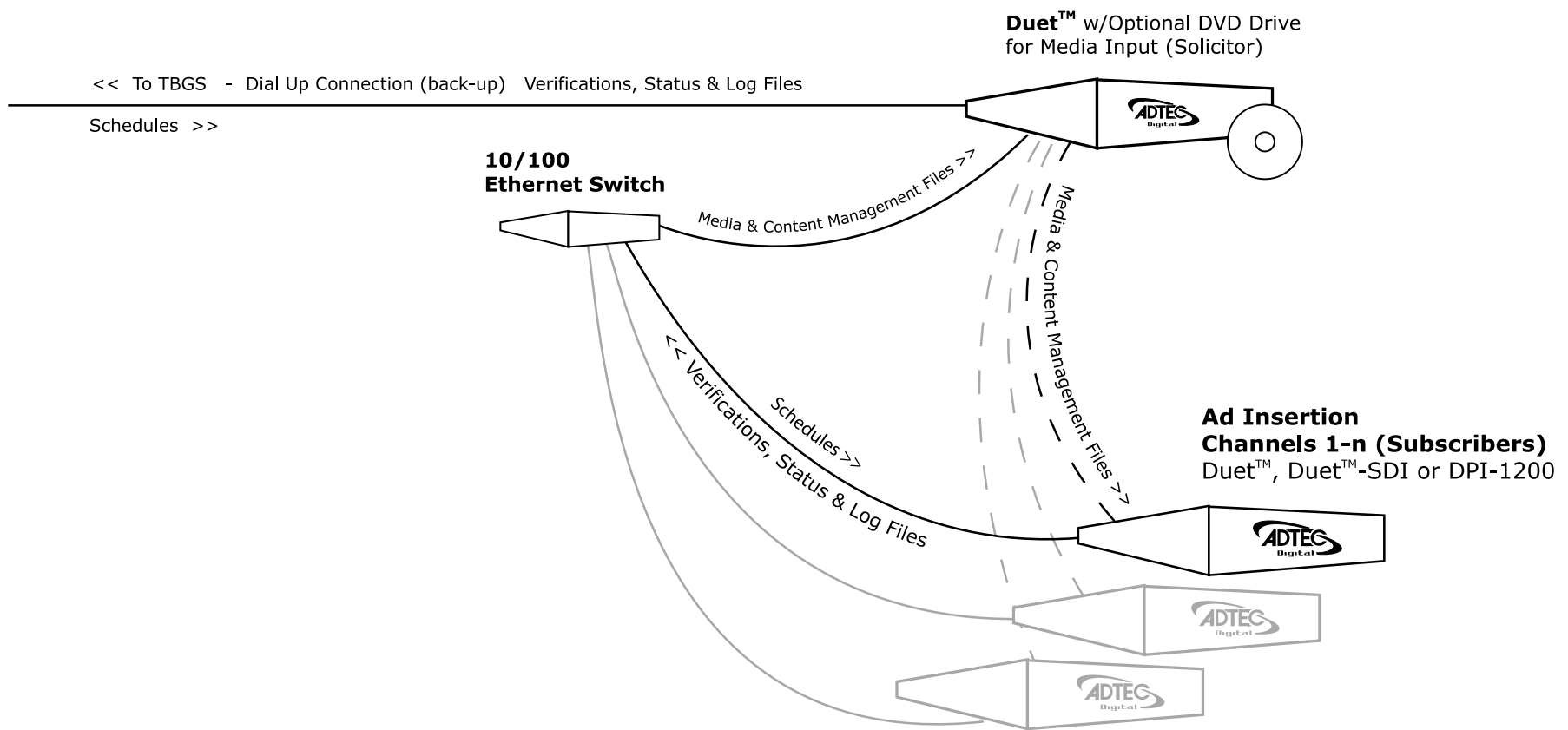


Adtec supports remote headends through satellite delivery of media and commercial insertion schedules using the File and Command Multicast Protocol (FCMP) system. Commercials and schedules are sent by adManage to the FCMP server and then to the

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.

**B4 - 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).

## C - 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)

Field #	Field Name	Bytes	Description
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.



D - 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).

Status Code	Definition	Possible Cause
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.

## E - Upgrading adManage

---

Notice: The instructions to upgrade adManage are intended for technical personnel only.

---

adManage is made up of several components including a SQL database, application services, and components in the Apache web server.

### Application Services:

Service Name:	Description:	FileName:	Notes:
AdtecAlarmVer1Service	Adtec Alarm Service	AdtecGatewayAlarmVer1Service.exe	
AdtecFileBackupVer1Service	Adtec File Backup Service	AdtecFileBackupVer1Service.exe	
AdtecContentVer2Service	Adtec Content Ver1 Service	AdtecGatewayContentVer2Service.exe	
AdtecMergerVer1Service	Adtec Merger Ver1 Service	AdtecGatewayMergerVer1Service.exe	
AdtecMVLVer2Service	Adtec MVL Ver1 Service	AdtecGatewayMVLVer2Service.exe	
AdtecRDYVer2Service	Adtec RDY Ver1 Service	AdtecGatewayRDYVer2Service.exe	
AdtecUnMergeVer2Service	Adtec UnMerge Ver1 Service	AdtecGatewayUnMergeVer2Service.exe	

#### Uninstall the Old Services:

1. Log into the TBGS server as an administrator or Adtec User
2. Open the Windows Service Manager  
(Windows 2000: Start>Settings>Control Panel>Administrative Tools>Services)  
(Windows 2003: Start> Control Panel> Administrative Tools> Services)
3. Right click on each of the above services and select Stop.
4. Open the adManage service installer application from  
C:\Program Files\Adtec\Gateway\ServiceInstaller.exe
5. Enter the Service Name for each of the adManage services or select the service name from the list on the left and click Uninstall.  
NOTE: The name must exactly match the Service Name in the table above.
6. Close and re-open the Windows Services Manager to verify that all the services are no longer installed.
7. Delete the adManage Service files from  
C:\Program Files\Adtec\Gateway\

#### Install the New Services:

1. Log into the TBGS server as an administrator or Adtec User.
2. Open the Windows Service Manager  
(Windows 2000: Start>Settings>Control Panel>Administrative Tools>Services)  
(Windows 2003: Start> Control Panel> Administrative Tools> Services)
3. Make sure that the service(s) you are installing are not currently installed.
4. Copy the new adManage Service files to the folder  
C:\Program Files\Adtec\Gateway\
5. Open the adManage service installer application from  
C:\Program Files\Adtec\Gateway\ServiceInstaller.exe
6. Enter the Service Name and Description for each of the adManage services and select the corresponding Service Path to each of the files or select the service name from the list on the left and verify paths, then click Install.  
NOTE: The name must exactly match the Service Name in the table above.
7. Close and re-open the Windows Services Manager.
8. Right click on each newly installed service and select Properties to make the following changes:  
General Tab > Startup Type = Automatic  
Logon Tab > This Account: Browse and select Adtec with a password of 408adtec2231.

---

NOTE: If the service does not start correctly after restarting the server, remove the service and restart the system before installing the service.

---

## adManage Database

Before you install a new database, make sure to back up your current database. Steps to backup and/or restore your database are below.

### Backup Database

1. Log into the TBGS server as an administrator or Adtec User.
2. Open the Windows Service Manager  
(Windows 2000: Start>Settings>Control Panel>Administrative Tools>Services)  
(Windows 2003: Start> Control Panel> Administrative Tools> Services)
3. Select the Adtec services, select Stop and verify that they have stopped.
4. - Open a MS DOS command prompt
  - Type: cd\  
- Type: mysqldump > C:\\backup.sql -u gatewayadmin -p  
(you will be prompted for a password, the password is adtec)

---

Note: systemname.sql is the file name that will be created. This can be renamed, but spaces are not allowed and it must end in the .sql extension. This file will be located on the local disc (C:) drive. Copy this file to a backup location.

---

### Restore Database

1. Log into the TBGS server as an administrator or Adtec User.
2. Open the Windows Service Manager  
(Windows 2000: Start>Settings>Control Panel>Administrative Tools>Services)  
(Windows 2003: Start> Control Panel> Administrative Tools> Services)
3. Select the Adtec services, select Stop and verify that they have stopped.
4. - Open a MS DOS command prompt
  - Type: cd\  
- Type: mysql -u root -p  
(you will be prompted for a password. It is 1root!)
  - Locate the database backup.sql file
  - Open the file and press ctrl + A to select all. Press ctrl + C to copy to clipboard.
  - Type: usegateway; then rightclick into the DOS window to past copied text and press enter
5. Restart the server.

## adManage Browser Files

The adManage browser is the actual pages and graphics that display in the browser window. The browser page files are served up by the Apache web server on the TBGS.

### Install New Browser Files:

1. Log into the TBGS server as an administrator or Adtec User.
2. Open the Windows Service Manager  
(Windows 2000: Start>Settings>Control Panel>Administrative Tools>Services)  
(Windows 2003: Start> Control Panel> Administrative Tools> Services)
3. Select the Apache service and select Stop.
4. Navigate to the C:\Program Files\Apache Group\Apache\modules\ folder and delete the following:
  - Delete the files folder
  - Delete the mod\_ScheduleMonitorApacheModule.so file
  - Delete the Cache folder if it exists.
5. Navigate to the C:\Program Files\Apache Group\Apache\modules\ folder and copy in the following:
  - New the Apache\modules\files folder
  - New Apache\modules\mod\_ScheduleMonitorApacheModule.so file
6. Restart the server.

## F - adVantage System Troubleshooting

The Advantage System is heavily dependent on network communications between the central office where the TBGS server is located and the remote headends. An understanding of networking communications is required to effectively troubleshoot the networking aspects of your adVantage system. Schedule delivery, verification delivery, and MPEG delivery are all heavily dependent on your network. You must maintain networking communication to each device for the system to operate.

The system consist of eyeMonitor(for alarms and monitoring), the TBGS(for distribution), adManage (for alarms and monitoring) Symphony-Pro and autoDialer (as back up tools) and the Duets( for insertion). After network integrity is confirmed, move to additional troubleshooting steps as listed below.

Testing the communication between the TBGS and a unit should be well understood. Any time a Network/Duet exhibits a problem, is replaced, or is upgraded, communication must be confirmed. Each time a Duet does not have a schedule or content, communications must be confirmed. After communications, configurations must also be checked. Configuration of networking routers, switches, Duets, and adManage must also be confirmed.

### General troubleshooting concepts:

1. Has anything changed?
  - Check with your headend tech, traffic and your IT personnel.
2. Is adManage configured correctly?
  - See Chapter 2 for correct configuration
3. Is the unit configured correctly?
  - See Duet Manual Chapter 3, Chapter 6 and Appendix F
4. Is the unit cabled correctly?
  - See Duet Manual Chapter 1, pg 9
5. Can you communicate with the unit over the network to and from the TBGS?
  - Ping the unit from the TBGS and then dial in to the unit and ping the TBGS from the unit.

## Network Troubleshooting

---

Networking communication problems can originate at the TBGS Level, Head End Level or at the Duet Level.

### Step 1 - TBGS Level Is your TBGS running?

You should be able to log in and move from program to program.

### Has anything in your network changed?

*Suggestion:* From the TBGS, confirm that the eyeMonitor application matches the one you may have at your workstation. If OK, then you have a networking problem between the TBGS and your workstation PC. Check networking communications between central office and cabling, router and switches using ping or trace route commands.

*Consider:* Has anyone worked on your network? Check with your system administrator. If the whole system is not reporting, reset the server. If this does not remedy the problem, go to Step 2.

### Step 2 - Head End Level

From the TBGS, can you PING the head end router or any of the units at the head end in question? If so, then restart your eyeMonitor. If that does not help, then physically check and reset your network components at the headend such as cabling, switches, routers and hubs.

*Consider:* Has anyone worked on your network or at the headend? Check with your system administrator and headend tech. At the Duet rack, check the network cabling and configuration and ability to communicate to other units at the head end by ping. Also try to ping the TBGS from the unit in question and other duets at the headend. If this does not remedy the problem, go to Step 3.

### Step 3 - Duet Level

From the TBGS, can you PING the Duet in question? If PING fails, you may have a Windows problem and you must reboot the server. If not, check your network components such as cabling, switches, routers and hubs at the central office.

*Consider:* Has anyone worked on your network? Check with your system administrator and headend tech.

If you can't connect to your Duet over a network connection, use your back up tool, Symphony-Pro, to dial into the unit to check for operation, configuration and ability to communicate to other units at the head end (via ping). Also try to ping the TBGS from the ad inserter in question and other duets at the headend.

If you can't connect over modem, have your tech check the network cabling and configuration and ability to communicate to other units at the headend. (via ping) Also try to ping the TBGS from the unit in question, the Gateway router and other duets at the headend. Finally verify all of the network settings on the ad inserter including the IP Address, the Gateway IP address and the Host IP Address. If you are unable to communicate, replace the Duet.

### **Scheduling, Verification and Insertion Troubleshooting**

When a network is not working correctly, and discovered via deficient run rates or monitoring tool, it can be one or a combination of the following:

- Configuration
- Scheduling
- Cueing

Only start the following checks and troubleshooting steps if you have verified communication with the process as listed above.

---

Note: Verifications will always be deficient if communication is lost!

---

### **Scheduling Troubleshooting**

- Has the needed schedule been put in the local schedules folder? Has it merged into the merged schedules folder?

- Is the time stamp of the merged schedule for any given unit newer than its corresponding scheduling in the local schedule folder? It should be newer.

- Is the time stamp of the MVL file in the MVL folder for that head end relatively new? The MVL file should be newer than the last schedule placed in the Local or Interconnect folders which indicates that the Scheduling portion of the adManage is working. The MVL file is updated each time a new schedule is placed on the TBGS.

- Check the schedule on the ad inserter (Duet or DPI-1200). Is the current schedule there? Is the schedule correct? You can check the actual schedule loaded on the ad inserter by using the Symphony Pro/ Conductor applet or by using an FTP program. If it is not current or correct, immediately use the autoDialer back up tool to send the schedule.

Additional checks, especially if headend hardware has changed:

- Check headend and unit configuration in adManage.
- Check the corresponding configuration in the Duet.
- Check cue tone history in the Duet log or from front panel.
- Check the receiver to make sure you are getting tones.
- Check the cabling for cueing.

After everything is checked you should replace the Duet to see if that resolves the issue.

### **Verification Troubleshooting**

Is the time stamp of the RDY file in the RDY folder for that unit relatively new? This indicates that the ad inserter is reporting back to the TBGS, and that the verification portion of the system is working. The RDY file updates itself every ad insertion Host Timer (usually configured for every 20 minutes or 1200 seconds)

Is the timestamp of the VER file in the VER folder for that unit or all units relatively new? This indicates that the ad inserter is reporting back to the TBGS. The Ver file will update itself two minutes after each insert. If you do not see a newer (timestamp) file then you may have a networking communication issue.

## G - FAQ

### **Why is my eyeMonitor black for a single network?**

Verifications are automatically sent back to the TBGS server 2 minutes after each insert and at two minutes after midnight for each network.

#### **Possible Cause:**

1. Verification not in verification folder or un-merged .VER folder
2. Hard drive is bad in Duet
3. Duet is not configured correctly (IP address, Host IP, Gateway IP etc.)
4. Cabling is not correct
5. No schedule is currently loaded for that network.

**Solution Steps:** Try these solution steps to resolve the issue.

- Close and restart eyeMonitor.
- Confirm that there is a schedule in local and merged folder.
- Confirm that the hard drive of the Duet is working by checking the Content Management > Drive Status within adManage. Also do a UNITS command from our terminal applet. It should respond with each partition's information. If it does not, reset the Duet or reset the drive and restart the unit.
- Confirm that the Duet configured correctly? Check networking configuration and channel ID.

### **Why is my eyeMonitor black for all networks?**

#### **Possible Cause:**

1. Loss of network communication to the head end.

#### **Solution Steps:**

- Close and restart eyeMonitor.
- Check the timestamp of the .VER in the TBGS? This will give you an indication when the networking was still working.
- Reset the router or switch at the headend and the Main office.
- Confirm that the Duet is configured correctly, check networking configuration settings?
- Confirm that the IP or other network-related setting have not been recently changed for the TBGS?

### **How do I test communications between a Duet in the field and the TBGS?**

From the TBGS server you must ping the IP Address of the Duet. If you cannot PING it, then configurations and wiring must be checked. Try pinging another unit in that head end for confirmation of a good connection to the head end. If you cannot ping other units at the head end then networking hardware may be the cause.

### **How do I check configurations in a Duet remotely?**

Connect to the Duet using Symphony Pro. Use the terminal applet and compare the configuration to either that of another duet in the same head end of a master CMDAUTO file your team should have. If you can't connect remotely you must go to the head end and check from the front keypad or by using a laptop. Configurations allow the Duets at the headends to work with the central server or TBGS. Duets must have a CCHHH number and the CMDAUTO file (Head End Specific) must be pushed to each unit. Once the CMDAUTO file resides on the unit, the unit must be reset. This configures the unit with settings that all of the units must have. (See Duet manual for more configuration detail). The IP address, the GIP, the HIP, the CCHHH number, the EMT setting, and making the avail times 00:00 must be done manually on each unit.

### **How do I check configurations in AdManage?**

After connecting to the AdManage HTML interface simply go to the Configuration Tab to check both the Head end setup and the channel setup. See your Advantage manual for further explanation.

### **How can I check to see if a spot aired using the TBGS?**

To search for a spot airing, it is advised to use eyeMonitor for verification of playback. One may also open the VER file for a given network in notepad and use the Find tool, by spot name, to determine when a spot played. Symphony can be used for some monitoring, but the Console and Verification applets are not recommended.

### **When are schedule, verification and other log files deleted from the Duets?**

The CCMS files for verifications (.VER), verification backup (.VBK), and log filter (.LFR) will be automatically deleted by the same process that cleans out old trace log files (.LOG). The TRACEFILES MAX option (TFM) sets the maximum number of files to keep for each file type.

The schedule (.SCH) for the previous day is always deleted.

The ready report (.RDY), and the mirror list file (.MVL) files are updated daily, and will only reside as one file on the drive.

### **How do I verify communications to a Duet in an adVantage or TBGS system?**

Ping the unit from the TBGS, if you can't then reset the router in your office and try again or dial into the head end and check the Duet for proper configuration and functionality. If unable to, try pinging another Duet from the TBGS to prove networking function to the head end.

Also try to ping the TBGS from the Duet in question and finally try to ping the TBGS from another unit trying to prove two-way networking is OK. If it is concentrate your efforts on the setup in adManage or the Duet hardware itself.

### **My Alarms are not set up: How do I do that?**

See the Alarm Management section of this manual.

### **Why does an MPEG show up in my missing content section of adManage?**

Click on it. If it shows at least one Duet at a Headend is missing an MPEG that is scheduled in the next 14 days, the spot is missing from the Duet. Check to see if it is in the MVL. It will need to be in the MVL for at least 20 minutes\*\* before it gets distributed to the headend and another 20 minutes\*\* before it gets distributed to the other Duets at the headend .

\*\* Dependent on network speed, latency and EMT speed

### **The Duet does not have any MPEG files on it?**

Are MPEG files or spots missing from the Duet? Check to see if it is configured correctly, specifically for the CCHHH setting and the EMT setting.

Check to see if files for this unit are in the MVL, they need to be in the MVL for at least 20 minutes\*\* before it gets distributed to the head end and another 20 minutes\*\* before it gets distributed to the other Duets at the head end. Check connectivity to the Duet. See, How do I check connectivity to a Duet.

### **I added a unit at a headend - what do I do now?**

You must modify the CCHHH number on the units. Also, when installing a new head end or units, the CMDAUTO file must be pushed to each unit. Once the CMDAUTO file resides on the unit, the unit must be reset. This configures the unit with settings that all of the units must have. (See Duet manual for more configuration detail. The IP address, the GIP, the CCHHH number, the EMT setting, and making the avail times 00:00 must be done manually on each unit.

### **When does the Auto Backup service run?**

Adtec Gateway database backup service should run every night at 3am.

### **When does the Auto Expiration service run?**

This service should not be used. In adManage we provide a method to select expired material and purge it from the duet manually.

### **Why do I see an Expiration date of 1899?**

This is normal and indicates to the system that the content should never expire.

### **How do files get loaded to my Duets from the MVL?**

The MasterVideoLibrary on the TBGS is the master repository for thousands of media files. The only way that these files are transferred to the Duets is under the following conditions:

1. Scheduled: If the spots are placed on a schedule up to 14 days in the future, adManage will update the .MVL file content management directive to send the files to the Duet.
2. Evergreen: The new adManage and Duet 5/23/05 firmware or later supports evergreen of material to the Duet. This will allow you to send media to the duets even if it is not scheduled.

### **When do I need a Firmware/Software Upgrade?**

As a general rule, if it isn't broke don't fix it. However if you have a problem with your system please contact Adtec to see if a fix is available. Adtec does add new features from time to time and if requested a firmware upgrade can be provided for additional upgrade and training fees.

### **My Duets are missing their Schedules and MPEG content?**

Make sure IP address, Host IP Address, Gateway IP address, Host Mode CCMS, CCHHH #, and ClientUserPassword are correct. Each Duet in a location must have the following:

ClientUserPassword: adtec,408adtec2231

(You can check this setting in terminal by typing cpw)

### **How do I set up/configure a new Duet for a TBGS System?**

#### **For the Duet:**

1. Install Firmware. Firmware must be 3-18-04 or later. (BANNER command or Select/Up arrow)
2. Check that the CCMS & AudioLevelControl feature keys are enabled (FEA terminal command, FEA 13 and FEA 12).  
Note: If ALC is being used, all wiring for audio must be using both channels. Use a jumper if needed.
3. Set the CBD Network. Up arrow from there to NetSets Preset and hit Select & Enter to setup the NetSets automatically. (Front Panel)
4. Make sure all Avail times in the Netsets are 00:00:00. CCMS mode uses dynamic avails.
5. Give each inserter an IP Address, GIP Address (if any), and Host IP Address. (Front Panel or Software)
6. Configure EMT Settings. (Front Panel or Software)
7. Send CMDAUTO.DVC file to each inserter. (Software only) or configure from front key pad
8. Change the CCHHH setting to the Novar Channel # and Head end #. (Front Panel or Software)
9. BE SURE TO SAVE CONFIGURATION. CFG SAVE in the Terminal Window.
10. Reset the Duet.

#### **TBGS Changes:**

11. Add user, if needed, in ServU program: Give permissions by assign each user a permissions group.
12. Don't forget to make the changes in your Locations Applet in Symphony Pro. Do this in both networking and dial-up locations.
13. Add Channel and/or headend in AdManage software.

### **My MVL is not current and is not correct**

**Reason:** You may have old Local Schedules and Merged Schedules, on the TBGS for the previous year. Since old schedules have been processed, this means that the MVL file includes old scheduled MPG's. When the Duet goes through the Mirroring process, it will look for these files and then report them missing. The DUET may be searching for files that are no longer on the hard drive or it is requesting more MPG's that are not needed. It has to finish its Mirroring process in order for it to look for a new MVL which can take a while.

**Solution:** Create a new folder for old schedules and by year and Archive them Delete the .MVL file off the TBGS Verify your most recent schedules are present. Delete the .MVL file in every unit at the headends. Allow it to retrieve its new MVL.

**Maintenance:** Keep your old schedules archived so you don't overlap years. The MVL process looks forward 14 days for schedules. The MVL file is created based on these schedules. The MVL service looks at the schedule file name first then the time stamp to see if an updated schedule has been sent. Old schedules have confused your units. It is imperative that you keep your old schedules archived so you don't overlap years.



## H - Standard Operating Procedures

### Daily (Before T&B Verification)

1. Use eyeMonitor's Verification Report to confirm that all verifications have been returned since the last billing cycle (marked Complete). Determine if there are any missing or partial verifications that will need to be retrieved since the last time you verified. If verifications are missing or partial, correct the issue or use autoDialer to get the final verification from the ad inserter.
2. Review Alarms assigned to you for corrective action.

### Daily (All Day)

3. Use eyeMonitor's Discrepancy Report to determine if there are any outstanding error or cue issues that indicate insertion failures. Implement corrective action for discrepancies.
4. Use eyeMonitor's Headend Monitoring Zones to get a real time status of all channels in each headend. To evaluate a run rate for a particular headend, select any cell within that headend and right click to navigate to Headend Analysis.
5. Use the eyeMonitor Encode List Report (or the adCode encode list) and encode all missing ad content.

### Daily (After Schedules Are Created)

6. Use EyeMonitor's 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.
7. 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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