Inside:

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Chapter 1 - Introduction

Overview

The adManage traffic and media management application is at the core of the Adtec enterprise management of commercial insertion systems. The application is optionally available to support Interconnects and provides schedule merging, verification splitting and detailed real time network analysis and alarms. The web based interface of adManage is ideal for local or remote access via any web browser. The SQL database provides rock solid stability and rapid access to real time system data. A full complement of user definable alarms provides notification via e-mail, text messaging, paging as well as visual alarming via the browser.

Applications

- Cable Digital Ad Insertion
- Broadcast Digital Ad Insertion
- Digital Splicing into Transport Streams

Benefits

- Centralized control and system monitoring Prevents the loss of media files
- Prioritized MVL files Prevents missed inserts
- Time and Date Stamped content management Reduces FTP traffic between the Solicitor and the TBGS
- 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

- Media Management with missing content monitoring.
- Interconnect Media Management (Optional)
- Schedule Management
- Interconnect Schedule merging (Optional)
- · Verification management
- Interconnect Verification splitting (Optional)
- Log File and Ready File management
- SQL Database interface for Alarms
- SQL Database interface for eyeMonitor
- Redundant operation (Optional)
- Browser interface
- Evergreen content to each headend for material that is always available.
- Purge content from a headend or from the whole system.
- Archive content 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	400 Watt power supply Two Hot Swap SATA hard drives Software RAID 1 (Mirroring) > 160 GB storage capacity Dual Gigabit Ethernet NICs Pentium 4 Intel Server mother board Intel remote Server management Windows 2000 Server IIS FTP Server mySQL Database Adtec adManage application Physical 19" x 1.7" x 25.7" 30 Lbs.
TBGS - 2RU	Dual 550 Watt Hot Swap power supplies Four Hot Swap SATA hard drives Hardware RAID 5 > 400 GB storage capacity (1.5 TB max) Dual Gigabit Ethernet NICs Pentium 4 Intel Server mother board with 1GB RAM. Intel remote Server management Windows 2000 Server IIS FTP Server mySQL Database Adtec adManage application Physical 19" x 3.4" x 25.7" 35 Lbs.

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.
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 connectivity to the TBGS.

This documentation reflects functionality of adManage version 2.3.0 released July 2005.

Chapter 2 - Getting Started

Logging Into adManage

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

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.

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= 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

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.

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

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

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

Pager Phone Number: Phone number for the paging terminal service used.

Pager ID: 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).

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)

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)

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 001-099. 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 IPA: 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 yes. 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 (00012345678 = 12345678)

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

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. 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 indentifier 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)

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 ad inserters.

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

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 adManange, 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.

Content Expiration Variables

The Content Expiration Service maximizes the use of available disk space on each ad inserter. When 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. These fields configure this service.

Expire Run Time: The daily run time for the Content Expiration Service. This is written in 24 hour format (ex. 13:32)

Expire Range: The number of days the expiration service will go back before expiring the content.

Expire Gap: The number of buffer days before expiring content.

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.

Copy Local: Allows you to turn on/off copying of local schedules even if the Interconnect schedules are missing.

Copy Interconnect: Allows you to turn on/off copying of Interconnect schedules even if the local schedules are missing.

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\.

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.

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)

Export Schedule Template Path: The location of the pre merge templates.

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 "\"

Local Schedules: The location of the raw unmerged local schedules. This location is used by the Merger Service to merge local and Interconnect schedules. The default on the TBGS 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 sent back to your traffic and

billing service. The default locations on the TBGS are:
C:\TBGS\Verifications\Local for local verifications and
C:\TBGS\Verifications\Interconnect for Interconnect verifications.

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 on the TBGS is C:\TBGS\ InterconnectSchedules\.

Merge 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 location on the TBGS is: C:\TBGS\MergedSchedules\.

Import Local Schedule Path: The source path to obtain local schedules for the TBGS.

Export Local Verification Path: The destination path to an independent server where local verifications are placed for further processing. It is used by ITVerificationPreparationService.

Transaction Logs: The location of the RDY and LOG files received from the ad inserters. The default location on the TBGS 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 and verification. The default location on the TBGS is: C:\TBGS\MirrorListFiles\.

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 path is: C:\tbqs\Archive\.

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 location on the TBGS 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. The default location on the TBGS is: C:\TBGS\ MasterVideoLibrary2\.

FCMP

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The configuration of FCMP is used when a FCMP server exists as a part of the system. FCMP is an IP address satellite delivery system. It is used to distribute the media and schedules to each headend using current and future schedules as a reference and comparing those to the inventory transmitted via autoDialer. The TBGS creates a list of required files for each site which the FCMP delivery service uses to send content directly to each unit. The schedule file is sent from the gateway by the FCMP application. At midnight, the system will remove the old schedule and load the next day's schedule. If there is no new schedule, the old schedules will be cleared and no inserts will occur until a new schedule file is received. The system checks once every 10 seconds for an updated schedule file.

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

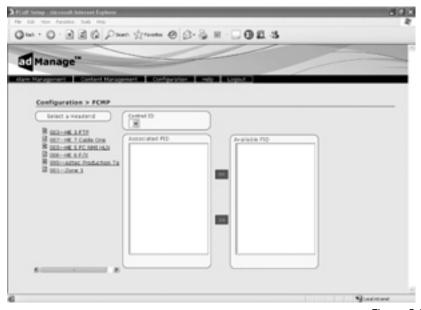


Figure 2.5

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.

Chapter 3 - Using adManage

TBGS Server and adManage Services

MVL Service:

The MVL Service automates the tracking of ad copy. The MVL file, or Mirror List File, is created by the TBGS 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. Each ad inserter creates a RDY or "Ready File" and it is returned to the TBGS. The RDY file reports schedules loaded, ad copy in the inserters, and ad copy missing from the inserters, all based on the comparison of the MVL file originally placed on the ad inserter. From Ready files, the MVL Service is able to report accurately the status of content in 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. 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.

Adtec's EMT or Ethernet Multicast Transfer protocol is a proprietary protocol designed by Adtec for high-speed distribution of files. EMT resides at the physical layer of the Ethernet protocol and operates by multicasting files from a designated solicitor to all subscribers on the network.

Alarm Service:

The Alarm Service notifies the adManage users of 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.

Content Expirations 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 searches for new schedules at user definable intervals. 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. The system checks once every 10 seconds for updated schedules.

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.)

Database Backup Service:

The Database Backup Service backs up all tables existing in the Gateway Database daily at 3:00 am. The files are placed in C:\ MYSQL\BIN\BACKUP\ for safe keeping, and can be used to recreate the Database in the event of a catastrophic failure or corruption.

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 directory. (C:\TBGS\MasterVdeoLibrary2\)

Local Schedules:

Local Schedules are .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 CCMSS 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 .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.

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 C.

Missing:

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

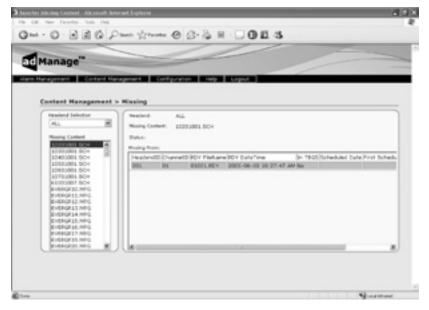


Figure 3.1

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 TGBS and what the scheduling specifics are for the missing file.

Drive Status:

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

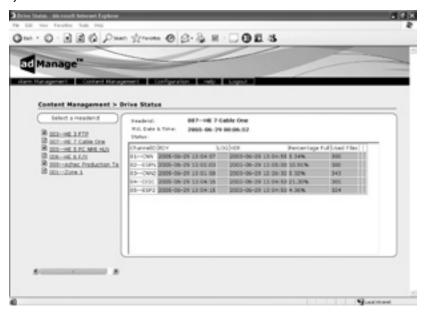


Figure 3.2

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 log 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.

Purge:

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

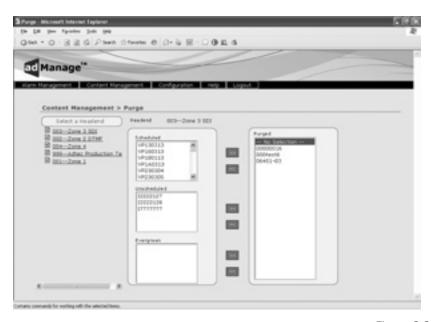


Figure 3.3

The process provided by the Purge section allows further content management by marking files for deletion in the .MVL file for each headend. The files per headend are broken down into three categories. 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 file. Evergreen files have been user designated as a permanent part of the MVL and are typically added to the end of the .MVL file list.

Moving files from one of these lists to the purge list marks that file "to be deleted" from the MVL. To move these files, highlight them and single-click on the double right arrow next to the corresponding box. This will place them on the purge list. 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 preformed every 20 minutes 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. Note that if a file is in the Evergreen list, as a safeguard it cannot be purged until it is first removed from Evergreen.

Evergreen:

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



Figure 3.4

adMange 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 ad inserter. 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 evergeen 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.

System MVL:

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

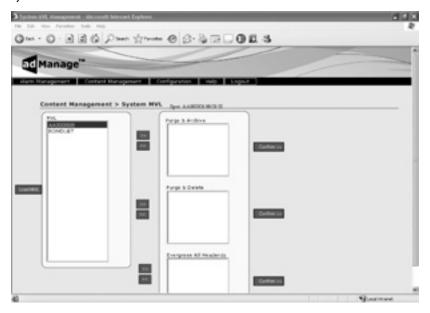


Figure 3.5

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. This interface allows you to complete three types of processes regarding the MVL file.

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

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

Finally, you can Evergreeen the file for all Headends. This will add the file name to the .MVL file for all headends that are part of the system. Evergreen material becomes permanent for the headend until removed by the ad inserter.

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)

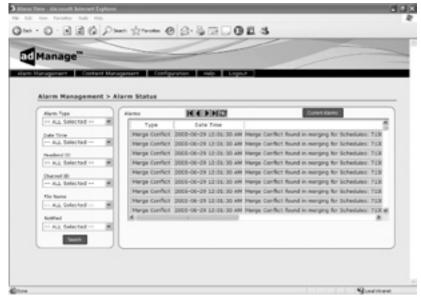


Figure 3.6

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. The navigation buttons, also at the top of the grid, will help you look through and refresh the real-time alarm status. 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 18 types of alarms. Refer to the following chart for status and troubleshooting assistance.

	Alarm	Definition	Possible Cause
0	Merge	Merge occurred	- Status Only
1	Merge Conflict	Merge conflict occurred	- Local and interconnect spots are scheduled for the same avail time.
2	UnMerge	UnMerge occurred	- Status Only
3	Not Checked-In	Channel has not checked-in	- The ad inserter has not reported back a .RDY file in the past hour, most likely caused by a communication problem.
4	Check-In	Channel checked-in	- Status Only
5	Obtained Schedule	Channel obtained schedule	- Status Only
6	Missed Schedule	Channel missing schedule	- The ad inserter is missing a schedule.
7	Obtained Content	Channel obtained content	- Status Only
8	Missing Content	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.
9	No Netset Cue	Channel had no netset cue	- The ad inserter did not receive a cue to insert the commercial during the scheduled avail. Typically causes could be DTMF tone a mismatch, schedule problems or cue issues with the network.
10	Missed By No Break	Channel had a missed by no break	- The unit is missing a schedule.
11	Missed by NO SPOT	Channel had a missed by no spot	- Ad is missing from the commercial inserter Ad is missing from the TBGS (has not been ingested).
12	Mapped Drive Failure	TBGS had a mapped drive failure	- The TBGS has a network problem preventing a mapped drive from working properly.
13	Server Missing Content	TBGS is missing content	- Scheduled ads have not been ingested yet or placed in the Master Video Library.
14	Server Missing Local Schedules	Gateway is missing local schedules	- Local schedules have not been copied into the folder. - Schedule file names have the wrong date format.
15	Server Missing Interconnect Schedules	Gateway is missing Interconnect schedule	- Interconnect schedules have not been copied into the folder. - Schedule file names have the wrong date format.

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	Alarm	Definition	Possible Cause
16	Server Missing Merged Schedules	Gateway is missing merged schedules	- adManage did not merge the local and interconnect schedules adManage merger service not running; check service status source local and interconnect schedules not available to merge.
17	Run Rate Report	Run Rate Report	- A report is generated to detail the run rates of each channel at a headend.

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.

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 23:00 as the Time Off.

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)

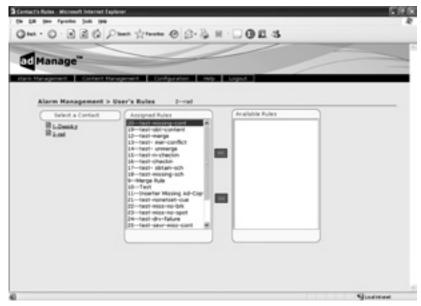


Figure 3.8

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 hours.

Mapped Drive Retry: If a mapped drive failure is found, this designates how often to recheck for failure. Marked in minutes.

Verification Time-out: The frequency to check for current verifications failures. Marked in hours.

Verification Retry: If a verification failure is found, this designates how often to recheck to see if failure still exists. Marked in minutes.

Ready Time-out: The frequency to check for current RDY file failures. Marked in hours.

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 minutes.

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

Schedule Retry: If a schedule failure is found, this designates how often to recheck to see if failure still exists.

No NetSet Check Time: The frequency to check for no netset cues.

No NetSet Retry: If a no netset failure is found, this designates how often to recheck to see if failure still exists.

Ad Copy Time-out: The frequency to check for missing ad-copy.

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

Email Host: The email host to send alarm emails through.

From Email Address: The email address from which emails will be sent.

Appendix

- A Contacting Customer Support
- B TBGS/adManage Technical Reference
- $C \quad \ \ \text{-} \quad \text{adVantage The Adtec Ad Insertion Enterprise Solutions}$
- C1 Traffic & Billing Central
- C2 Connected Headend
- C3 Satellite Serviced Headend
- C4 Disconnected Headend
- D CCMS Schedule Format
- E Verification Status Codes
- F Upgrading adManage



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

Priority - 24 Support Plan (24 Hour)

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



TBGS/adManage Technical Reference

TBGS-1 Hardware Features

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

TBGS-2 Hardware Features

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

Features and specifications are subject to change without written notice.



Ad Insertion Enterprise Solution

1 - adManage/TBGS

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

2 - Traffic and Billing

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

3 - eyeMonitor

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

4 - autoDialer

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

5 - adCode

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

Headends

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

6 - Networked Headend

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

7 - Disconnected Remote Headend

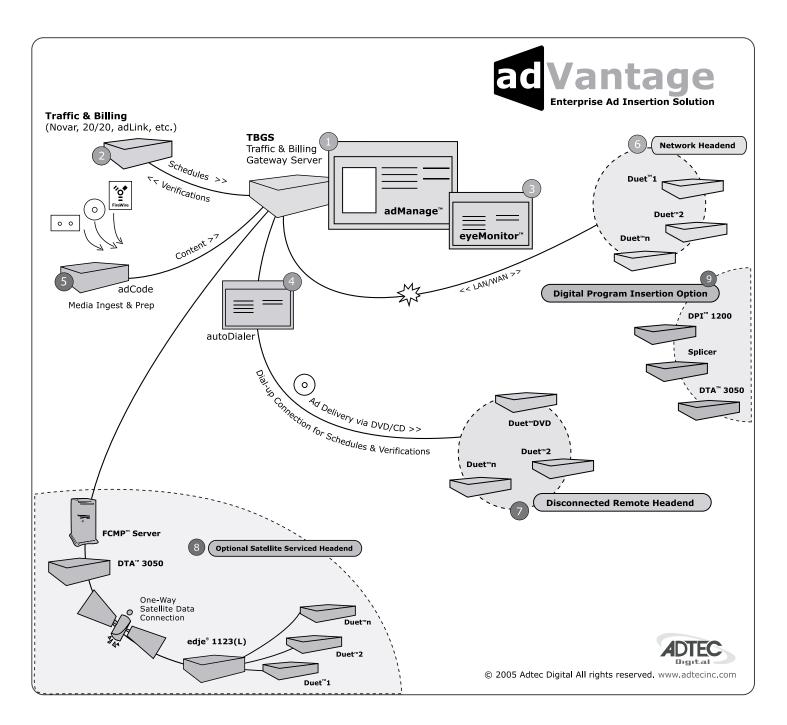
What can you do when a headend is so small or remote that it has no economical network connection and satellite is not an option? Media can be ingested by adCode and burned onto a CD or DVD and sent to the headend where the disk is simply placed into a Duet-DVD unit. The Duet-DVD automatically makes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

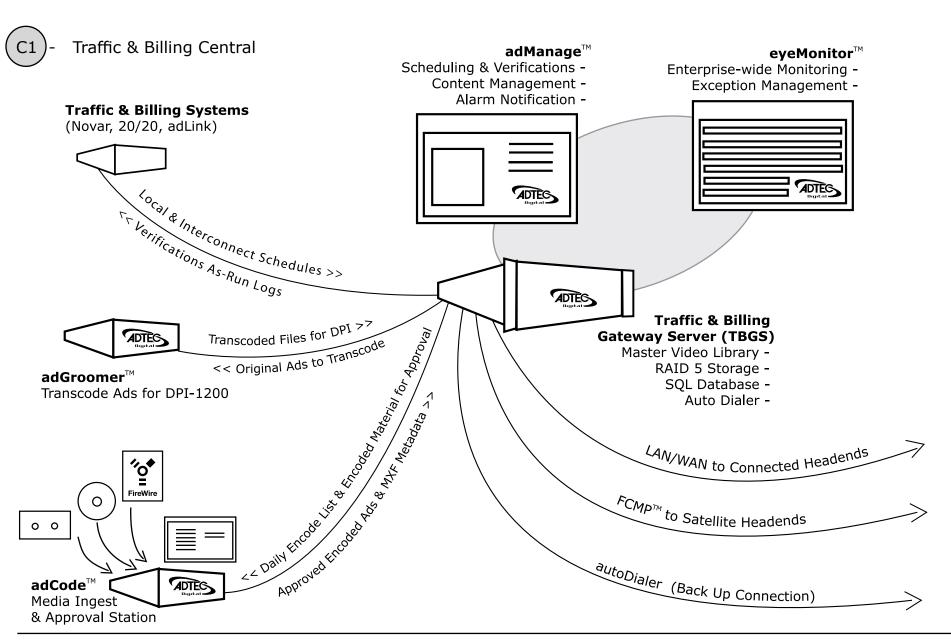
8 - Optional Satellite Serviced Headend

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

9 - Digital Program Insertion Option

Adtec's DPI-1200 digital-into-transport (DIT) ad server takes the place of up to twelve Duets. Designed for the all-digital headend, the DPI-1200 will deliver seamless splicing effortlessly in concert with Duets in your analog systems. The DPI-1200 can deliver up to twelve programs to the ad splicer. adManage transparently delivers media and schedules and retrieves verifications and status monitoring in the DPI environment just as in any other type of headend. The adGroomer provides automated transcoding of media from legacy encoders making the media compliant with Cable Labs VOD standard which has been chosen by major MSOs as the standard for DPI media ingest.



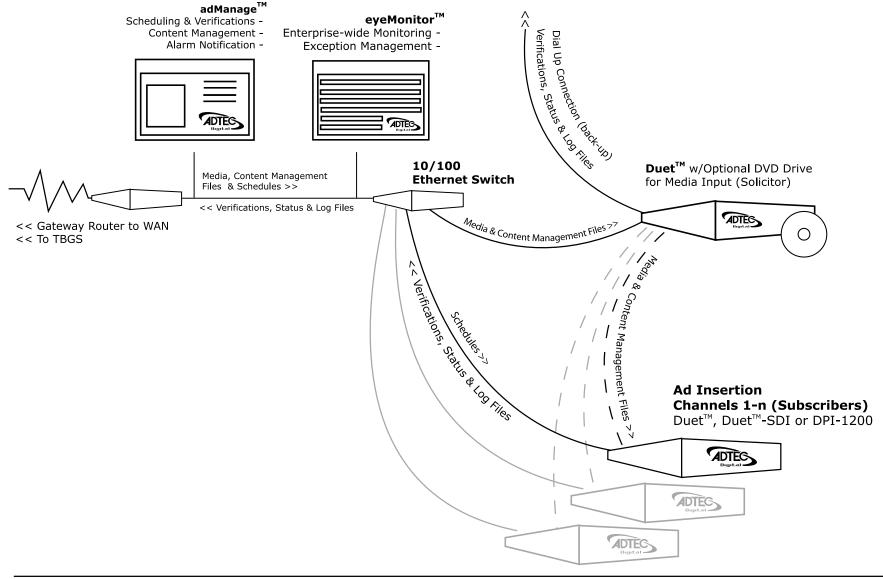


The Adtec commercial insertion enterprise solution centers around the Traffic & Billing Gateway Server (TBGS) which hosts adManage, the Master Video Library and the content management database. adManage merges new local and interconnect schedules to create a

master insertion schedule for each channel at a headend. After each commercial insertion is completed, the verification file is created for both the local and interconnect traffic systems. New content is ingested by adCode and released to adManage for distribution as needed by each

headend. Enterprise wide monitoring is provided by eyeMonitor which displays the status of commercial insertion and content management for each channel and highlights exceptions for corrective action.

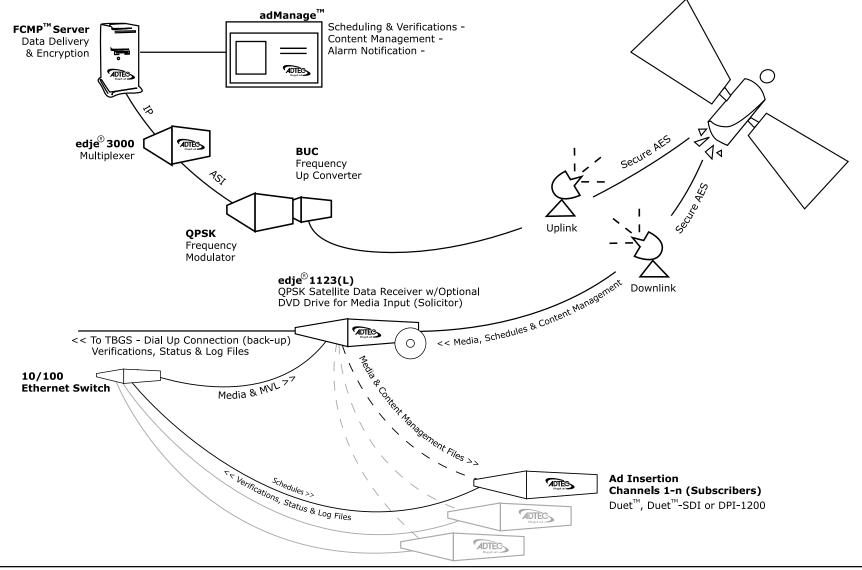
C2 - Connected Headend



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

management directives are retrieved once by the headend solicitor over FTP and then passed on locally to the other commercial inserter subscribers using an Ethernet Multicast Transfer (EMT). Each commercial inserter is responsible for retrieving insertion

schedules and providing status, verifications and content management by FTP back to adManage.

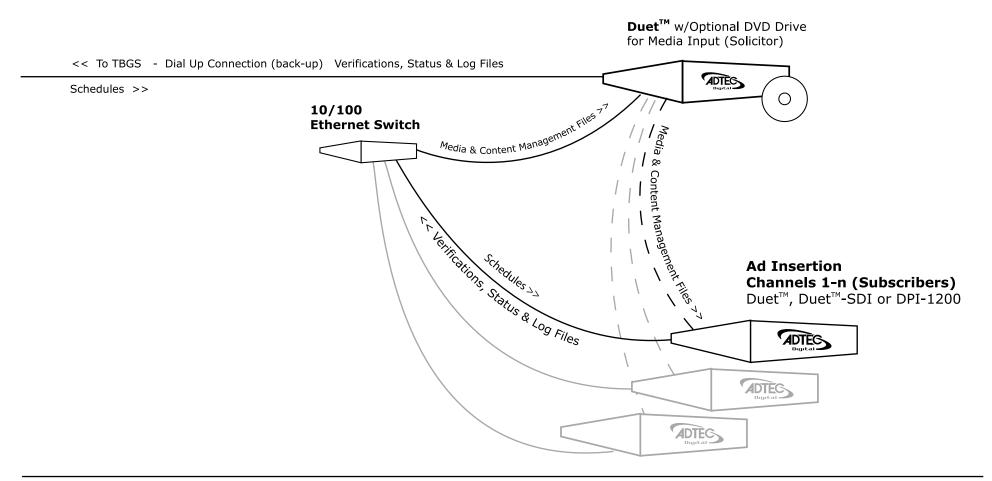


Adtec supports remote headends through satellite delivery of media and commercial insertion schedules using the File and Command Multicast Protocol (FCMP) system. Commercials and schedules are sent by adManage to the FCMP server and then to the

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.



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).



- 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

М -

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.



- 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 reencode 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.



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:
AdtecAlarmService	Adtec Alarm Service	AdtecGatewayAlarmService.exe	
AdtecContentExpirationService	Adtec Content Expiration Service	AdtecGatewayContentExpirationService.exe	Not always installed. Please confirm with Customer Service before installing with your system.
AdtecContentVer1Service	Adtec Content Ver1 Service	AdtecGatewayContentVer1Service.exe	
AdtecMergerVer1Service	Adtec Merger Ver1 Service	AdtecGatewayMergerVer1Service.exe	
AdtecMVLVer1Service	Adtec MVL Ver1 Service	AdtecGatewayMVLVer1Service.exe	
AdtecRDYVer1Service	Adtec RDY Ver1 Service	AdtecGatewayRDYVer1Service.exe	
AdtecUnMergeVer1Service	Adtec UnMerge Ver1 Service	AdtecGatewayUnMergeVer1Service.exe	

Uninstall the Old Services:

- 1. Log into the TBGS server as an administrator.
- 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 following 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 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.
- 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 there are no services 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 MySql as the Service Dependency then enter the Service Name and Description for each of the adManage services and select the corresponding Service Path to each of the files 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 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.

Backup Database

- 1. Log into the TBGS server as an administrator.
- 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 mySQL service and select Stop. Note: there may be other adManage services which are dependent on mySQL which will also stop.
- 4. Copy the C:\mysql\data\gateway\ folder to a backup folder like C:\backup\ mysql\qateway\.
- 5. Copy the C:\mysql\data\mysql\ folder to a backup folder like C:\backup\ mysql\mysql\.
- 6. Restart the server.

Note: If you are upgrading the database, follow steps 1-5 of the "Backup Database" section above and then steps 4-6 of Restore Database below to copy in the new database.

Restore Database

- 1. Log into the TBGS server as an administrator.
- 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 mySQL service and select Stop. Note: there may be other adManage services which are dependent on mySQL which will also stop.
- 4. Copy the new mysql\data\gateway folder into the C:\mysql\data\gateway\ folder.
- 5. Copy the new mysql\data\mysql folder into the C:\mysql\data\mysql\ folder.
- 6. 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.
- 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.
- 4. 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.



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