



## TrafficManager User Guide



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# Preface

This guide describes the Vantage TrafficManager product and its components, explains how to use the Dublist Portal for managing dublists, and presents typical scenarios and workflows you can create using TrafficManager to manage your commercial inventory.

These are the chapters in this guide:

- [Preface](#)
- [Introduction](#)
- [Using Dublist Portal](#)
- [Creating Dublist Portal Configurations and Schemes](#)
- [Configuring Catch Server Schemes](#)
- [Commercial Production Workflows](#)

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# Introduction

This guide presents an overview of TrafficManager, a specially-designed Vantage media-processing system that automates the process of receiving, ingesting, analyzing, transcoding, approving, and delivering commercials for broadcast and cable companies.

This chapter provides an overview of TrafficManager and its components, including these topics:

- [How TrafficManager Works](#)
- [TrafficManager and Related Actions](#)
- [Bringing it All Together in Workflows](#)
- [Conclusion](#)

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**Note:** This guide is written for video professionals who are familiar with Vantage. To use TrafficManager effectively, you should know how to create workflows and submit jobs in Vantage, and you should be familiar with the operation of Workflow Portal. If you aren't familiar with Vantage, we suggest that you read the *Vantage User Guide* and *Vantage Domain Management Guide*. If you aren't familiar with Workflow Portal, please read the Using Workflow Portal chapter in the Vantage User Guide.

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## What Is TrafficManager?

TrafficManager offers the services, components, workflow actions, and system interfaces needed to automate and streamline commercial and content handling for television broadcasters and cable television facilities.

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**Note:** TrafficManager is an optional, licensed Vantage feature. For details about licenses, see licensing topics in the Domain Management Guide.

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TrafficManager provides a complete solution for managing syndicated and commercial media using rules you specify to find, process, and deliver the media ready to air. TrafficManager workflows can perform each of these steps automatically:

- Ingest media from clients and national delivery systems
- QA inspection and correction (with operator review if required)
- Transcoding to broadcast formats
- Dublist reconciliation
- Delivery to ad insertion or broadcast servers
- Automation system notification

TrafficManager handles local, regional, and national ad ingest and processing. For national ads, TrafficManager integrates with common digital media delivery services, such as Javelin, ExtremeReach, and Comcast ADN (Radiance). Commercial media with metadata and trim points are ingested and processed automatically. For local ad submission, a customizable Web Upload Portal provides your clients with their own Web page for submitting assets and metadata directly into your Vantage workflows which are triggered when they receive a file.

Dublist monitoring and inventory tools let you quickly verify which commercials have been processed and which are pending and may need your attention.

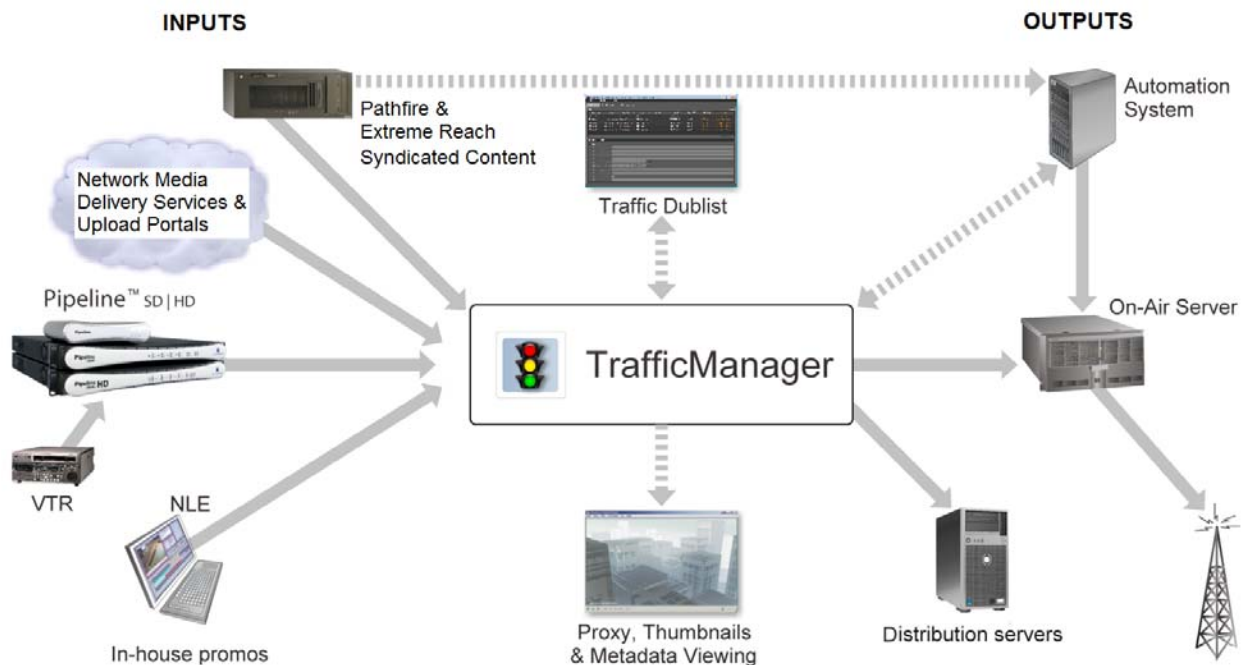
Once submitted to TrafficManager workflows, media can be automatically checked by Vantage Analysis and optionally by third party tools such as Aurora, Baton, and VidChecker to ensure compliance with your audio and video specifications (including CALM act audio loudness), detect and process captions, and streamline the legal compliance review and approval process using web-based review and approval tools and automated content preparation.

Best of all, TrafficManager offers superior flexibility, allowing you to build and modify rules for processing media, and easily replicate those workflows to other operations.

# How TrafficManager Works

TrafficManager provides the ability to automatically manage commercials and programs received from various sources including syndicated content providers, media delivery services, local advertisers, and in-house content providers. The flexibility of TrafficManager easily accommodates the functions shown in this figure, and more.

Traffic Manager Overview

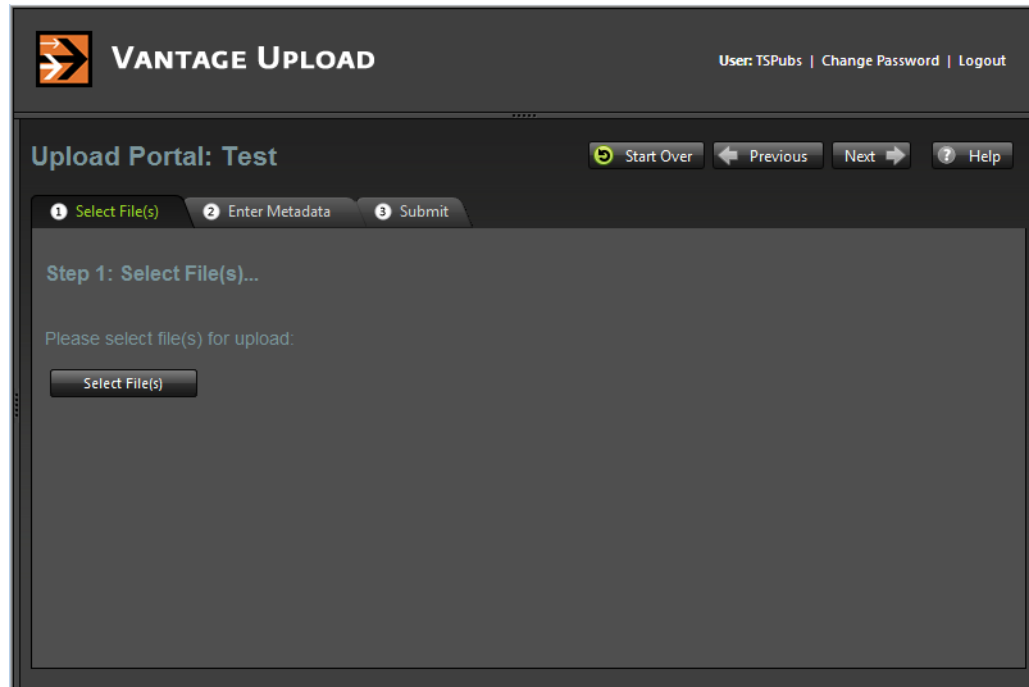


These programs provide the capabilities to handle the functions shown:

- **Web Upload Portal**—web app used by advertisers and network media delivery services to upload commercials to your server. The Upload Portal can also be used internally for editors to submit promo content with metadata to TrafficManager.
- **Management Console**—administrator client program used to create user accounts, catalogs, variables, labels, nicknames, dublist schemes, Dublist Portal and Workflow Portal configurations and access privileges.
- **Dublist Portal**—offered as a Windows program and a Web application for viewing, monitoring, and managing traffic dublists in real time.
- **Workflow Designer**—the client program for creating and managing workflows that handle traffic ingest from servers and catch servers, transcoding, and distribution. Media, dublist, and sidecar files can be automatically received and processed, including taped commercials digitized using Telestream Pipeline. Media, dublist information, and sidecar file outputs can be deployed automatically as shown to broadcast and cable automation systems, on-air servers, and distribution servers.
- **Workflow Portal**—the primary user client program for managing commercial inventory, including preview and approval, adding metadata, and adding trim points, and submitting these assets to workflows to produce media ready for distribution.

## Web Upload Portal

The Web Upload Portal is a Web application that provides you with a customizable Web interface to your TrafficManager system through which local and regional advertising clients can submit their ad media. You can create an account and a customized Web page for each client.

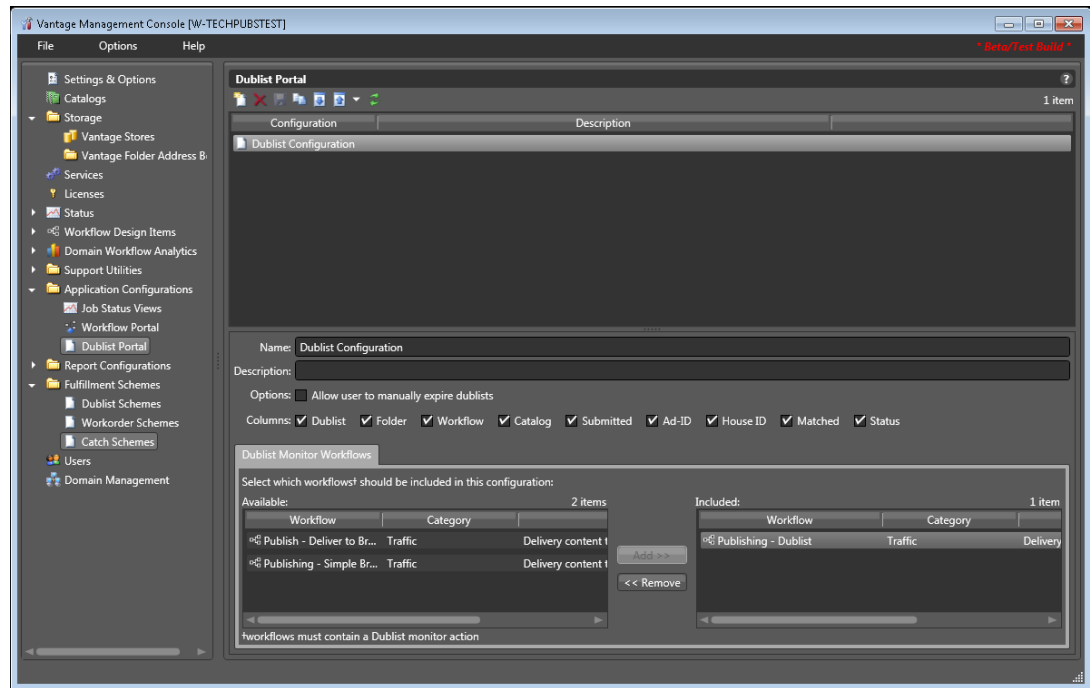


When clients log in, the page outlines a simple three-step process and provides an interactive interface that allows the user to (1) select a file, (2) enter metadata, and (3) submit the file. When submitted, the file goes directly to your TrafficManager ingest workflow specified when you customized the Upload Portal for your client.



## Management Console

Administration of the TrafficManager services, users, configurable user interfaces, dublist schemes, and licensing is done using the Vantage Management Console.



The console provides the tools to accomplish these tasks:

- Set up user accounts in the Users panel.
- Make Vantage catalogs for holding different TrafficManager projects.
- Create Job Status Views to allow users access to jobs associated with workflows.
- Create Workflow Portal configurations to allow users to browse the content inventory processed through TrafficManager.
- Create Dublist Portal configurations to allow users to view the status of dublists. (See the [Creating Dublist Portal Configurations and Schemes](#) chapter later in this guide.)
- Implement dublist schemes containing parsing rules for various dublist types.
- Create catch schemes for the general purpose Catch action if you want to customize a specific type of catch server not not supported specifically. (See [Configuring Catch Server Schemes](#) later in this guide.)
- Access many other tools for system administration, performance monitoring and analysis, reporting, etc.

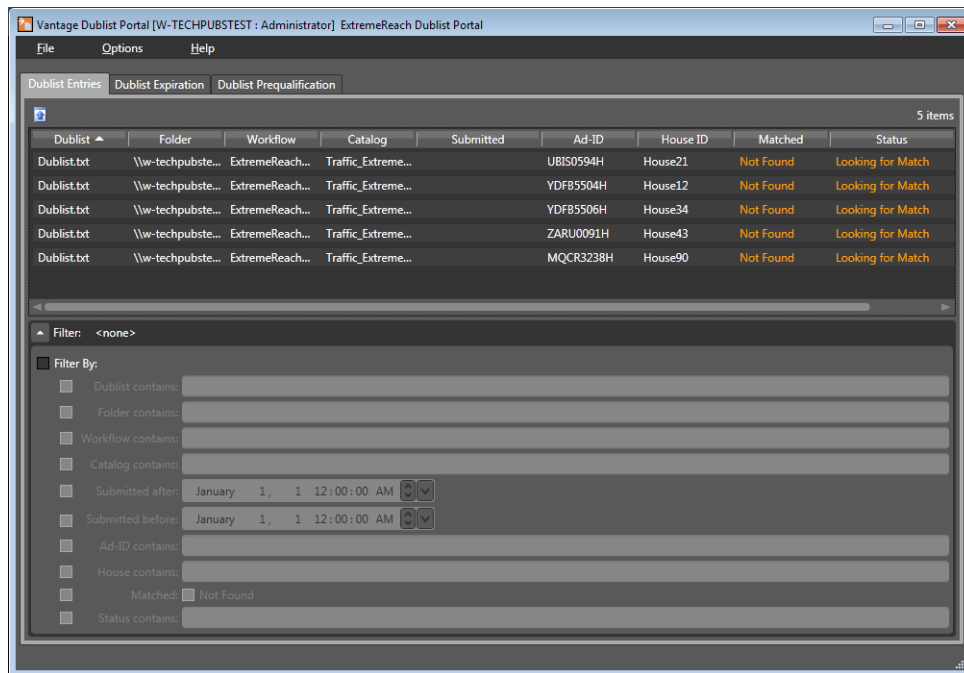
Refer to the *Domain Management Guide* for detailed descriptions of performing these tasks.

## Dublist Portal

The Dublist Portal—offered as a client Windows program and as a Web application—allows operators to monitor and manage dublists associated with Dublist monitor workflows. Operators can perform these operations:

- Verify that dublists have been received and processed
- Expire dublists whose processing is complete
- Test new dublists against existing commercial inventory to see what ads are available for processing
- Identify missing commercials

The Dublist Portal presents a list of TrafficManager dublists processed by Dublist workflows. Filters allow you to narrow or widen the list based on various criteria. The Dublist Portal includes a tabbed panel for viewing dublist expirations and expiring dublists immediately. Another tabbed panel allows you to pre-qualify dublists to see what will happen when you submit a dublist to a workflow.



Before it can be used, the Dublist Portal must be configured by an administrator using the Vantage Management Console (see the *Domain Management Guide* for details). Individual operators or groups of operators can have their own portal configurations created and saved for them, including these features:

- Name and description of the particular portal configuration
- Selection allowing the user to manually expire dublists
- Selections of information columns to include/exclude from the display
- List of permitted users who have access to the configuration
- List of dublist monitor workflows the particular portal configuration can access.

## Workflow Designer

Workflow Designer is the “drawing” space where you construct ingest workflows as well as media processing workflows of other kinds. A *workflow* in TrafficManager is a set of connected actions, each performing a specific task. Using the many available actions, you can construct workflows to perform automated media and file processing tasks:

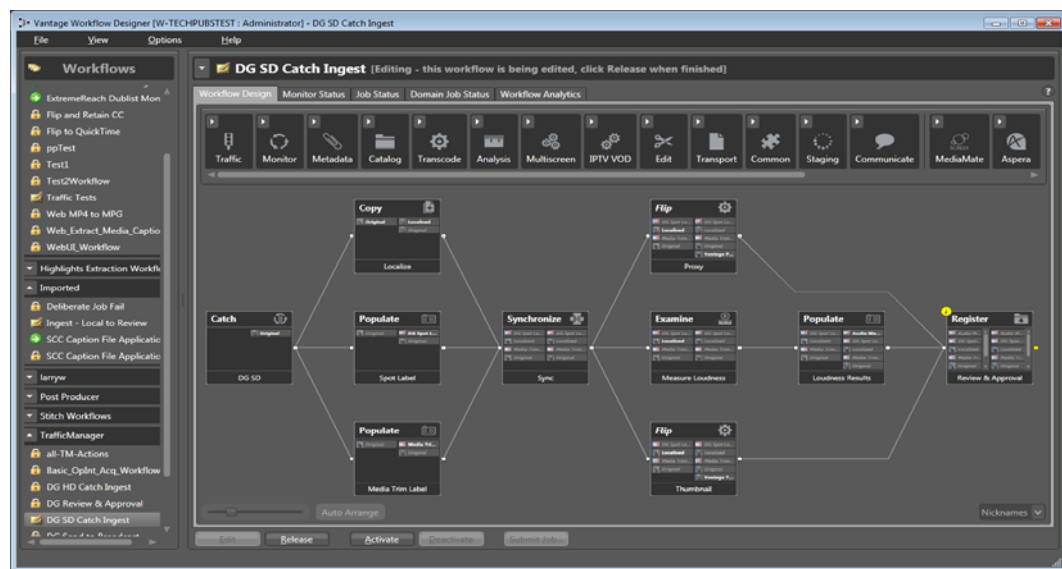
- Ingest media from a catch server or the Upload Portal, transcode it, and send it to a catalog of available assets.
- Monitor a dublist folder, process incoming dublists, reconcile the dublist against the catalog of available assets, prepare the commercial for broadcast, deliver it, and notify an automation system that spots are ready for air.

To get you started, pre-made workflows and professional services are available from Telestream, and of course, you can create your own workflows. You construct workflows in the Workflow Design workspace by dragging actions (Catch action, Copy action, Flip action, etc.) from the top menu bar. You then connect the actions to form a logical chain of tasks that are executed by Vantage services. Workflows are saved in the Vantage domain database and are executed by Vantage services.

To start a workflow, you click Activate. Workflows are executed as jobs, which are created and submitted automatically whenever a workflow action discovers a file to process, or when you click Submit Job to manually send a file to the workflow.

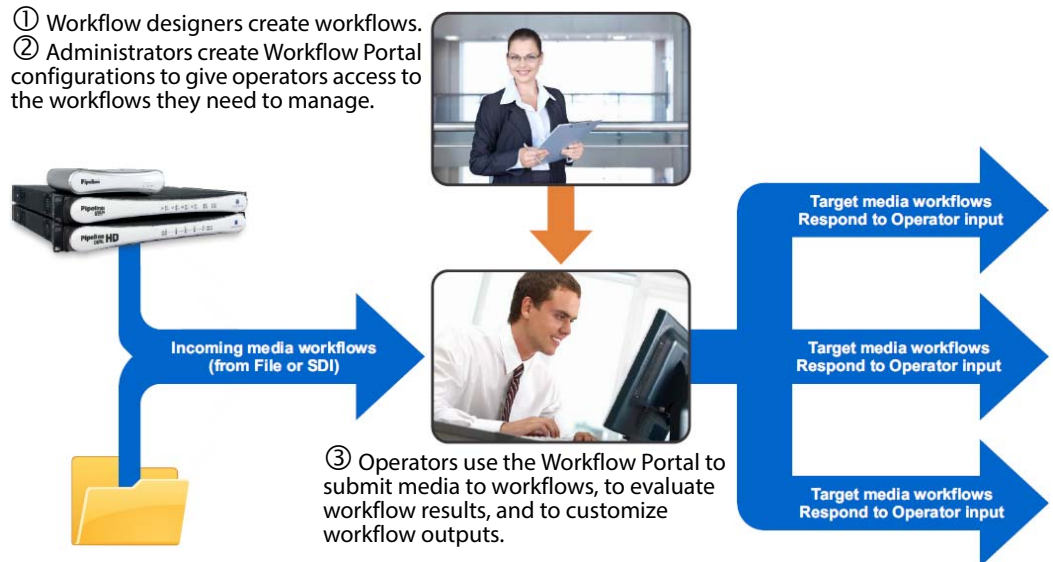
To edit a workflow after testing, Deactivate it, and click Edit. Then change the workflow. When you're done, click Release. When you are editing a workflow, others using Workflow Designer can view but not edit the workflow.

Once your workflows are activated, operators manage the running workflows and the files they process. In many cases, no operator intervention is required, but they can view job status using the Vantage Web Apps, check dublist status using the Dublist Portal, and review commercial inventory using the Workflow Portal.



## Workflow Portal

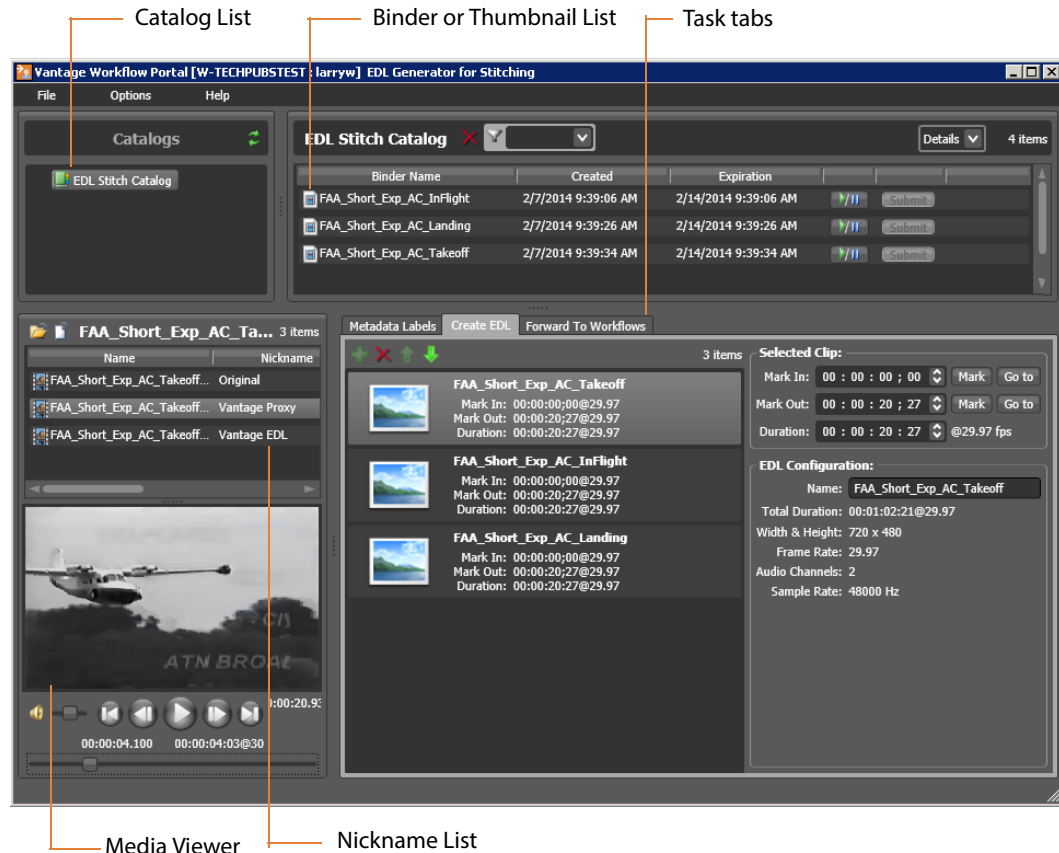
TrafficManager workflows are typically designed to automate commercial processing, but operator intervention and approval may be required during media processing. For example, an operator might examine proxies to verify commercial content, scrub and set trim points, and add missing metadata. The Workflow Portal, which comes in both desktop and Web versions, gives operators access to those capabilities. This figure shows how the Workflow Portal is implemented.



Workflow Portal (shown in the figure below) provides these media processing capabilities:

- Browse Vantage catalogs and network servers for available assets:
  - Preview/scrub media
  - Verify that all required files are present
  - Review associated metadata labels
- Update metadata and submit media to other workflows for further processing:
  - Enter or edit metadata
  - Configure variables for use in the next workflow
  - Mark in/out trim points on an asset's timeline
  - Mark the media as approved or rejected

To implement Workflow Portal, an administrator must first use the Vantage Management Console to create portal configurations for operators based on their assigned responsibilities. See the *Vantage Domain Management Guide* for details.



When using the Workflow Portal desktop application, you can navigate through all the fields and controls by repeatedly pressing the Tab key. Use the Shift + Tab key combination to move through the fields in reverse order.

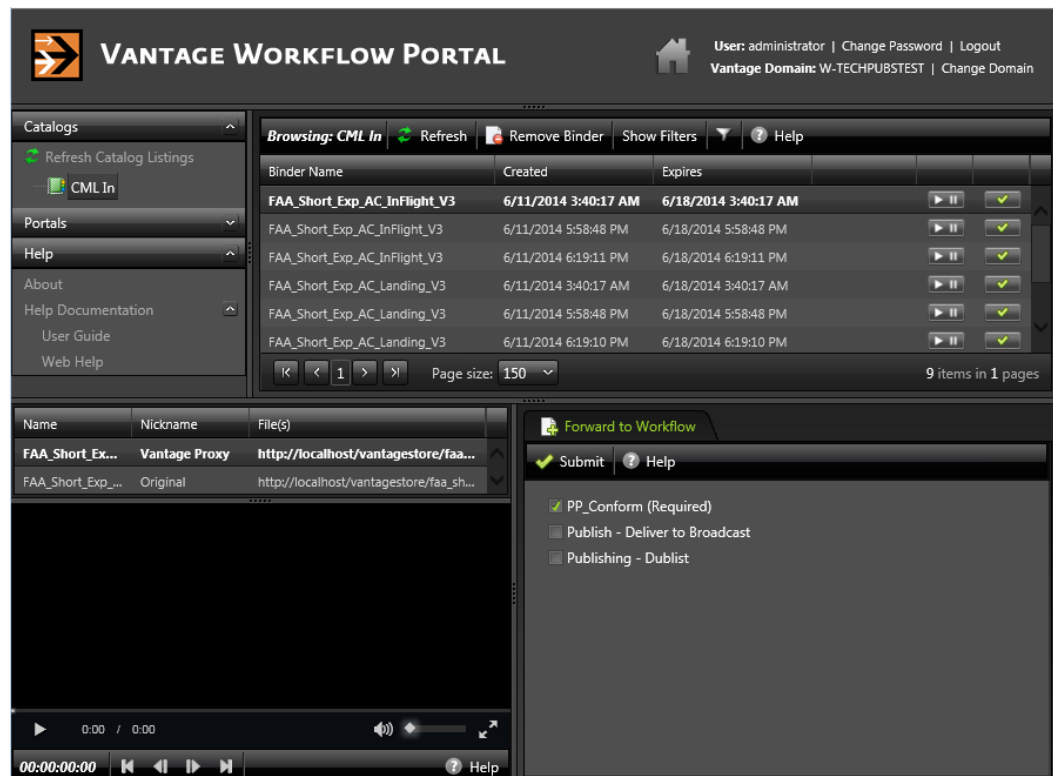
The following topics describe the components of the Workflow Portal:

- Catalog list—catalogs contain binders which contain processed media files
- Binder list—binders contain all the files processed by associated workflows
- Program menus—menus for accessing domains, user accounts, help, etc.
- Metadata Labels tab—allows modifying and adding metadata
- Create EDL tab—includes tools for creating an EDL with mark in, out, duration
- Forward to Workflows tab—permits manually submitting binders to a workflow
- Media viewer—allows viewing proxy media files produced by workflows
- Nicknames list—lists non-proxy media file nicknames

Note that depending upon your Portal configuration, some components may be hidden from operators to streamline their experience. For details of Workflow Portal operation, see the *Using the Workflow Portal* chapter of the *Vantage User Guide*.

The figure below shows the browser-based Web Workflow Portal commonly used by TrafficManager operators. The layout and functionality of the Web version is very similar to the desktop version, although not all features are available. Having a web client enables operators to manage workflows and jobs from remote computers without having to install a client application.

To access the portal, enter this address in your Web browser's address field:  
*http://[servername]/Vantage/Portal/* where the server name is the Vantage domain server. For details of Web Workflow Portal operation, see the *Using the Workflow Portal* chapter of the *Vantage User Guide*.



# TrafficManager and Related Actions

Vantage TrafficManager includes special actions adapted specifically to managing commercial traffic, and it also makes use of other Vantage actions to create workflows that automate the entire process of ingesting, processing, and deploying commercials according to received dublists. These are the TrafficManager actions as well as general actions useful in the traffic management process:

- [Automate Action](#)
- [Catch Action](#)
- [Watch Action](#)
- [Receive Action](#)
- [Dublist Action](#)
- [Populate Action](#)
- [Copy Action](#)
- [Synchronize Action](#)
- [IPTV VOD Action](#)
- [Flip Action](#)
- [Multiscreen Actions](#)
- [Multiscreen Actions](#)
- [Notify Action](#)
- [Deploy Action](#)

## Automate Action

The *Automate action*, which is executed by the Communicate Service, is similar to the Notify action. It contains system-integration extensions which are relevant to TrafficManager workflows, enabling you to save job data or other metadata to a file and interface with external automation systems. This capability ranges from writing XML-based material to a file system to direct integration with specific automation systems.

In TrafficManager applications, this action is useful to notify automation systems that a commercial has been processed and is available for air. For example, a Notify action can create text or CSV dublists and provide them to automation systems that are capable of processing dublists in that format.

Each extension has specific features which are detailed in the manual page for the extension.

## Catch Action

A *Catch action* is a specialized origin action (an action used to start a workflow) for ingesting commercial media assets (including metadata) from catch servers. It uses the Traffic Service to regularly poll the catch server to discover new files in the directory and of the file type it is assigned to find.

When a new file is discovered, the Catch action ingests the file and associated metadata and submits a job to the workflow for processing. The Catch action also harvests all commercial metadata available and makes it available to the workflow. Typically, the workflow is an ingest workflow which localizes the media, populates a metadata label, creates proxies and thumbnails, and registers the asset in a Vantage catalog.

These are some of the catch servers with which TrafficManager integrates: Adstream, Centaur, Comcast, DG, DMDS, Extreme Reach/Mijo, Fotokem, Hula MX, Javelin, On The Spot, Pitchblue, Smartjog, SpotGenie, Spottraffic, Video Express. Additionally, the Catch action includes a General Purpose Catch selection that allows you to implement your own custom catch server using a Catch scheme you define in the Vantage Management Console.

## Watch Action

A *Watch action* is an origin action; it uses the Monitor Service to regularly poll a target location (a directory, for example) on a device or file system (FTP, Windows network folder, etc.) to discover new files.

When a new file is discovered, the Watch action submits a job for the workflow which it is part of, for processing the file—usually, a media file. Watch actions typically are not used for local, national, or dublist workflows but may be used for promo ingest workflows or to ingest syndicated content from Pathfire through hot folders.

## Receive Action

A *Receive action* is an origin action. Receive actions are designed to receive files from other systems: workflows, SDK-based applications, and Workflow Portal, for example. Files can be automatically submitted from a previous workflow using the Receive and Forward actions.

## Dublist Action

A *Dublist action* is a specialized origin action for ingesting dublist files from a specified hot folder in TrafficManager applications. It uses the Traffic Service to regularly poll the hot folder to discover new dublist files, and will trigger new jobs when a dublist indicates that a commercial in the catalog is needed for air.

When a new dublist file is discovered, it is parsed by the specified scheme (created in the Management Console) and new entries are added to the master dublist maintained by Vantage. The Dublist action simultaneously polls the selected Vantage catalog for any media files which match entries in the master list. When matching files are found, the Dublist action submits a job to its TrafficManager application workflow for processing. Typically, the workflow is an on-air processing workflow which transcodes the media, optionally trims the clip, and alters audio for compliance. Then, it delivers the media to an on-air server and notifies an automation system.



## Populate Action

A *Populate action* uses the Metadata Service to read and write to metadata labels. During ingest metadata labels will be added to received media and will generally include trim information, audio levels, file properties, and commercial metadata. The metadata labels can then be reviewed and modified by operators in the Workflow Portal. At any stage of a workflow, Vantage can extract information from labels using the Populate Action, allowing Vantage to use trim points during a transcode, or audio level information when creating the final broadcast asset.

## Copy Action

A *Copy action* is executed by the Transport Service and is used to replicate a file from a source target (file system/device and directory) to a destination target (file system/device and directory). It typically performs this task by copying the file to the destination. In traffic applications, the Copy action copies the spot media from the catch server to the Vantage Store.

## Synchronize Action

A *Synchronize action* is a connector action that simplifies workflow design. In workflows where there are many-to-many relationships (for example, 6 Flip actions connect to 6 Deploy actions, which connect to 6 Delete actions), instead of drawing connections between all of the actions, you can simply connect them to a common Synchronize action. There is no inspector for the Synchronize action, because no configuration is required.

## IPTV VOD Action

The *IPTV Flip action* (in the IPTV VOD category) is included with the Cable / IPTV version of TrafficManager. IPTV VOD transcoding is designed for generating MPEG2 Transport Stream files and meeting multiplexing requirements. IPTV Flip actions are executed by the Cable Transcode Service, which can optionally run on a Lightspeed server for GPU-accelerated x264 encoding and video processing.

## Flip Action

The *Flip action* is executed by the Transcode Service (which in turn utilizes the Telestream Transcode & Analysis Engine). Use the Flip action to transcode media to a new format, and save it as a file, using a prescribed codec profile. How you configure the encoder depends on the encoder you choose.

## Multiscreen Actions

Multiscreen actions are used to produce high-quality, adaptive-bitrate (ABR) packages in industry-standard adaptive rate streaming formats. They are executed by the Multiscreen Service.

- [ABR Optimize Action](#)
- [Multiscreen Flip Action](#)

### ABR Optimize Action

The ABR Optimize action is designed to produce high-quality, adaptive-bitrate (ABR) packages which significantly reduce delivery bandwidth and distribution costs while ensuring perceived viewing quality. Multiscreen Flip actions are executed by the Multiscreen Service. Based on the SSIMplus quality measurement suite from SSIMWave, service providers and content creators can use the ABR Optimize action to set guaranteed quality levels using a measurement technique that closely tracks actual viewer perception.

### Multiscreen Flip Action

The Multiscreen Flip action is an optional, [licensed](#) feature. Multiscreen Flip actions are executed by the Multiscreen Service. The Multiscreen service may run on a Vantage [Lightspeed Server](#) or a standard Vantage server.

This action is open workflow capable if the Open Workflows license is installed.

The Multiscreen Flip action allows you to encode and package decoded digital baseband media into industry-standard adaptive rate streaming formats, including Adobe HDS, Apple HLS, Microsoft HSS, and others. Transcoding is performed by the Telestream Media Transcode and Analysis Engine on behalf of Vantage.

## Register Action

A *Register action* uses the Catalog Service to add a binder to a catalog. In TrafficManager workflows, when a workflow originates from a Catch action, the Register action will automatically set the binder name to the Ad-ID/ISCI code. The Dublist action uses the binder name as the commercial's unique identifier, so the binder name should be set to the Ad-ID/ISCI code. If the workflow does not originate from a Catch action, the media file name (without extension) will be used as the binder name by default. The Register action also allows a variable to be used to set the binder name.

When using the Register action for TrafficManager, consider using either the Overwrite or Rename Old conflict resolution settings. If Rename New is used, then the latest version of a spot will not be submitted by a Dublist action because the name of the binder will not match the Ad-ID/ISCI code.

## Notify Action

A *Notify action* is implemented in the Communicate Service to save job information to a file, or to interface with an external system. You can configure a Notify action to produce an XML file, and you can also use it to invoke a Web Service.

This action is used to notify automation systems that a commercial is available. For example, a Notify action can create text or CSV dublists and provide them to certain types of automation systems that are capable of receiving dublists in that format. Alternatively, the Notify action may create and deliver a BXF message.

## Deploy Action

A *Deploy action* is executed by the Transport Service to save specified files to a destination outside the Vantage domain. Unlike Delete, Move, or Copy actions, Deploy actions allow multiple files to be operated on simultaneously, and do not maintain a reference to those files in the binder after completion. This action is especially useful to move traffic output files to broadcast servers where they will await broadcast.

## Bringing it All Together in Workflows

The flexibility of Vantage TrafficManager enables you to construct workflows that do all of your production tasks: ingest files, analyze them, add metadata, flip formats, notify an operator to approve files, and send them to distribution or broadcast. The following descriptions present typical workflows. For details, see the [Commercial Production Workflows](#) chapter. During installation, your Telestream representative will likely install workflows for you and may perform customization. As a result, your workflows should already be pre-built. Because your workflows may be different than the workflows in this manual, the following examples are for illustration purposes only.

### Local, Regional, and National Ingest Workflows

Publishing workflows can automate ingesting media for local, regional, and national commercials.

- A Watch, Receive, or Catch action detects an incoming media file and passes its location and metadata on to the workflow. Catch is used for national workflows, Receive is used for local and regional workflows, and Watch is used for internal promos.
- A Copy action places the media in the desired commercial inventory location.
- Populate actions label the media and pass on metadata as variables.
- An Analyze action determines file properties and measures loudness.
- Flip actions transcode the media into proxy formats.
- A Register action registers the commercial in the desired catalog.

### Review and Approval Workflow

If your process requires a person to review and approve each commercial, you can create a review and approval workflow or incorporate a review stage into a larger workflow. Typically, your workflows will include actions such as these:

- Populate actions to create a label that approves an Approval parameter to indicate whether the media has passed a review or not (true/false).
- A Workflow Portal configuration allowing the operator to review the proxy and metadata, and indicate whether or not the commercial is valid.
- Decide actions to forward the media to a Review catalog or a Ready-to-Air catalog depending on the Approval parameter setting.
- A Notify action, if the commercial does not pass inspection, to send email to the administrator indicating that a commercial did not pass review.
- If valid, the commercial needs to be registered into the inventory catalog so that the Dublist monitor action can publish it for broadcast or cable playout.

## Dublist Processing and Publishing Workflow

Dublist processing employs a Dublist action to detect and parse dublists, and trigger jobs when the needed commercials are available in the catalog. Typically a dublist workflow will include these components:

- Dublist Schemes provide dublist parsing rules (set up in the Management Console).
- A Dublist action parses incoming dublists and triggers jobs when the needed commercials are available.
- A Flip action will typically convert the commercial to a broadcast, cable or IPTV format for play-out, correcting audio and trimming at the same time.
- The finished commercial will be delivered to on-air or ad insertion.
- A Notify action notifies an automation system when a spot is sent to the broadcast server for playout.

## Conclusion

You've now been through a brief overview of TrafficManager, and you can see its power to automate commercial processing. You can create workflows to ingest media and dublists, examine and transcode the media, create proxies for previewing, and deploy to automation systems and broadcast servers. In the next chapter—[Using Dublist Portal](#)—you'll get a look at the Dublist Portal.



# Using Dublist Portal

The Dublist Portal is provided as a Windows client program and a Web application that enables you to display and manage TrafficManager dublists processed by Dublist monitor workflows. The Web client can be used on any computer with a supported Web browser (see [Web Application Browser Requirements](#)) and a network or Internet connection to your [Vantage domain](#).

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**Note:** Both versions offer substantially the same user interface and functionality, except that the web version does not support dublist pre-qualification or display this panel. When a topic applies to only one client, it is noted.

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The Dublist Portal is configuration-driven. A Vantage administrator must create one or more Dublist Portal configurations in the Vantage Management Console before the portal can be used.

Filters allow you to narrow the list of dublists displayed based on various criteria. Dublist Portal also includes a panel for viewing and managing dublist expirations, as well as one for pre-qualifying dublists to see the results that will occur when you submit a dublist example to a workflow.

The following topics introduce and describe the Dublist Portal:

- [Starting Dublist Portal](#)
- [Dublist Portal Overview](#)
- [Monitoring Dublist Entries](#)
- [Managing Dublist Expiration](#)
- [Pre-qualifying Dublists](#)
- [Dublist Portal Windows Program Menus](#)
- [Troubleshooting Dublist Portal](#)

## Starting Dublist Portal

To start the Dublist Portal Windows program, do one of the following:

- Double-click the Vantage Dublist Portal shortcut on your desktop
- Click Start > All Programs > Telestream > Vantage > Dublist Portal.

To start the Dublist Portal Web application, do one of the following:

- Open your web browser and enter the Vantage web application home page URL:

*http://<IISServerName>/Vantage/*

*where <IISServerName> is the DNS name of the IIS server (or its IP address)—by default, the same as the Vantage domain server—and click on the Dublist Portal panel.*

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**Note:** If you don't know the name of the Vantage IIS server (by default, the same server where the [Vantage domain database](#) is hosted), contact your Vantage administrator or IT department.

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- If you are prompted, select a domain and log in, then select a configuration.
  - If you are prompted, enter your authorized user name and password
- 

**Note:** For information on managing Vantage Windows clients and web applications, including starting and stopping the program, logging into and changing domains, changing Vantage users and passwords, and selecting configurations, go to the Vantage User Guide > Vantage Client Programs Overview chapter.

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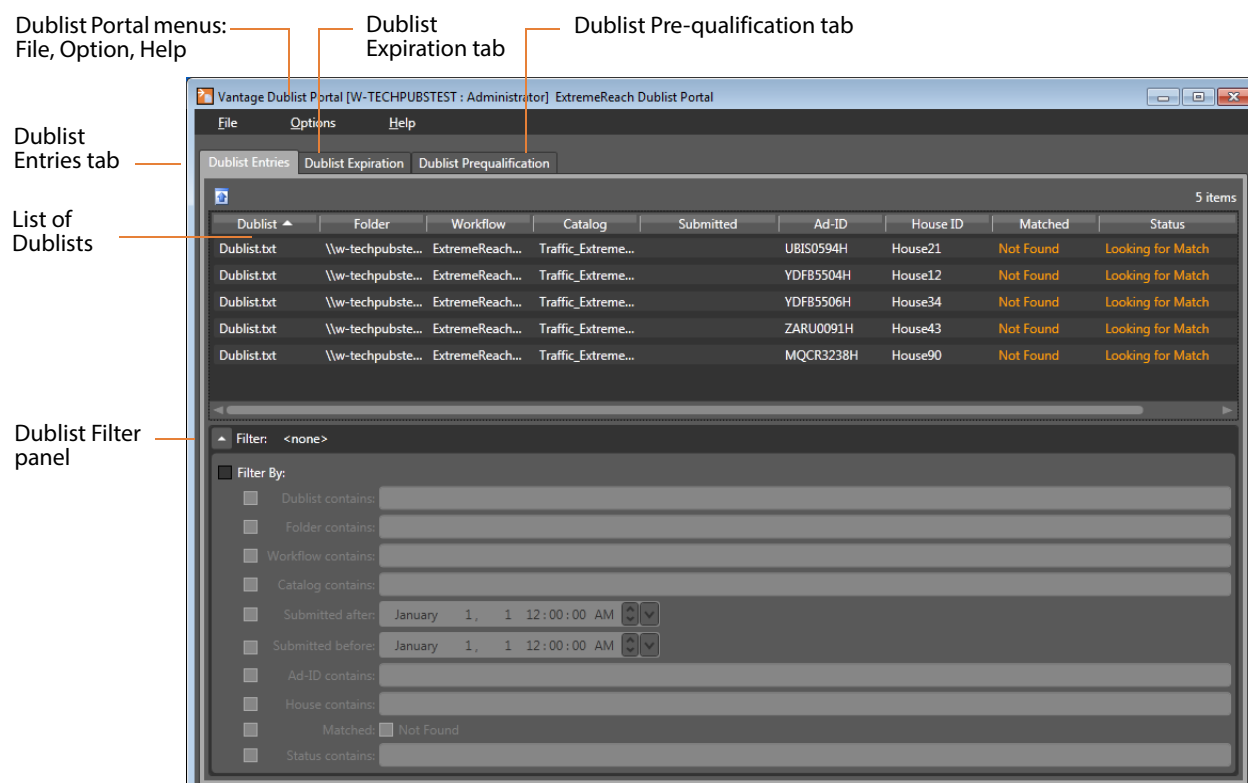
# Dublist Portal Overview

Dublist Portal provides a single window for all of its functionality, in both versions—the Windows client and the Web application.

- [Dublist Portal Windows Program User Interface](#)
- [Dublist Portal Web Application User Interface](#)
- [Using the Panels](#)

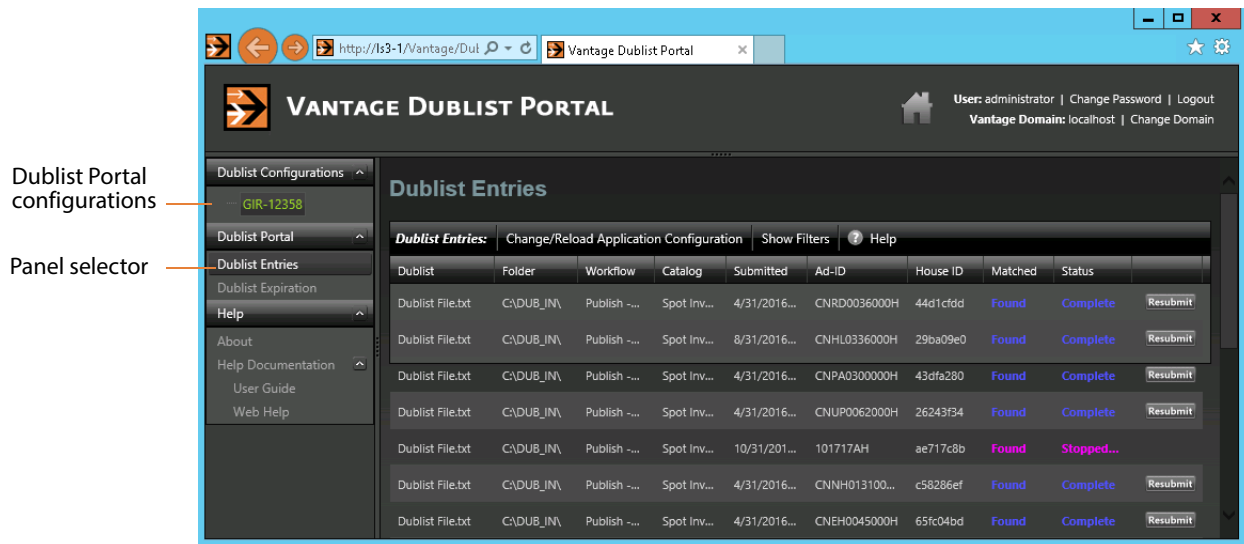
## Dublist Portal Windows Program User Interface

The Dublist Portal Windows program's main window is shown in this figure:



## Dublist Portal Web Application User Interface

The Vantage Dublist Portal web application's main window is shown in this figure:



## Using the Panels

The Vantage Dublist Portal window consists of these panels:

- *Dublist Entries panel*—[Monitoring Dublist Entries](#)
  - Displays a list of dublist ads corresponding to active Dublist Monitor actions and when enabled, permits resubmitting jobs.
  - Lists folder location, associated workflow and catalog (when submitted), Ad-ID or ISCI, whether a matching media file was found, and status.
  - Filters allow narrowing of dublists shown in the list.
- *Dublist Expiration panel*—[Managing Dublist Expiration](#)
  - Displays active dublist expiration dates and locations and allows dublists to be manually expired.
- *Dublist Pre-qualification panel (Windows only)*—[Pre-qualifying Dublists](#)
  - Displays active Dublist Monitors and allows dublist testing to show the results of submitting a dublist to a dublist monitor—specifically, what spots are in the catalog inventory that would be auto-forwarded by submitting the dublist.
- *Dublist Portal Menus (Windows only)*—[Dublist Portal Windows Program Menus](#)
  - File allows changing domain, user, password, and reloading a configuration.
  - Options lets you add headers to CSV exports and show or hide tool tips.
  - Help offers access to several kinds of built in and online help.

# Monitoring Dublist Entries

Display the Dublist Entries panel to monitor your current dublist entries—do one of the following:

- *Windows client*—Click the Dublist Entries tab
- *Web app*—Open the Dublist Portal item in the menu and click on Dublist Entries

The Dublist Entries panel, which is the primarily-used panel, displays a list of dublist ads by dublist, which have been processed or are waiting to be processed by Dublist-action workflows. Using this panel, operators managing the traffic system can monitor the system in real time, verifying that dublists and their ads are being correctly processed and matched up with associated media files (spots). The Dublist Entries panel provides this information about dublists:

- *Dublist*—dublist name or identifier
- *Folder*—location where the dublist is stored
- *Workflow*—workflow that processed the dublist
- *Catalog*—catalog containing the dublist and associated binders
- *Submitted*—date and time the dublist was submitted for workflow processing
- *Ad-ID*—an ID assigned to the media (spot), often this is an ISCI code
- *House ID*—an internal name or identifier assigned to the spot
- *Matched*—an indicator showing whether the dublist is matched with a media file
- *Status*—current status of the dublist
- *Resubmit*—When enabled in a dublist configuration, the Resubmit button on completed jobs enables the operator to resubmit a previously-processed ad for re-processing.

To export a given dublist as a CSV file, click a file in the list, click the Export arrow, and browse to save the file.

## Resubmitting Jobs

To resubmit a dublist entry—a previously processed ad (or other asset)—click the Resubmit button on its row.

Workflow Designer displays a Status dialog indicating it has been resubmitted. (If the workflow it was submitted to is not active, you'll be advised.)

## Filtering Dublists

Open the Filter panel at the bottom of the table to filter your list.

Checking the Filter box and the boxes of any desired filter criteria allows you to narrow the list to display only dublists matching the filter criteria. For example, you can filter by *Dublist contains* to find a dublist or group of dublists by their names, or you can filter to

find lists processed between a selected pair of dates. Data entry fields are alphanumeric.

These are the dublist filter criteria:

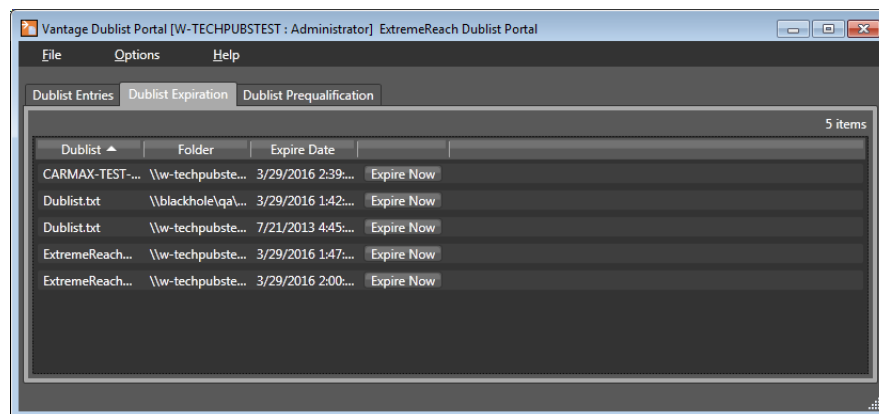
- *Dublist contains*—select dublists matching all or part of the name
- *Folder contains*—selects dublists matching all or part of the folder name
- *Workflow contains*—selects dublists matching all or part of the workflow name
- *Catalog contains*—selects dublists by matching all or part of the catalog name
- *Submitted after*—selects dublists submitted after the specified date
- *Submitted before*—selects dublists submitted before the specified date
- *Ad-ID contains*—selects dublists by matching all or part of the Ad-ID
- *House contains*—selects dublists by matching all or part of the House ID
- *Matched/Not Found*—selects dublists that have been matched to media spots, or if Not Found is checked, selects dublists that have not been matched to spots.
- *Status contains*—selects dublists by matching all or part of their status

## Managing Dublist Expiration

To display the Dublist Expiration panel and view dublist expiration information, do one of the following:

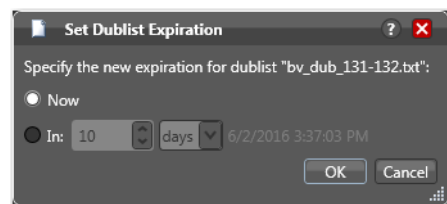
- *In Windows*—Click the Dublist Expiration tab
- *In the Web app*—Open the Dublist Portal item in the menu panel, and click on Dublist Expiration

Dublist Portal displays a table showing dublists ordered by expiration date and time, as shown below. The list allows you to plan and manage the expiration of each dublist or group of dublists.



## Manually Expiring a Dublist

The Expire Now button allows you to expire a list immediately or at some future time (in hours, days, weeks, etc.), which will end all related processing at the specified time. Click Expire Now on a dublist whose expiration you want to adjust. Dublist Portal displays the Set Dublist Expiration dialog:



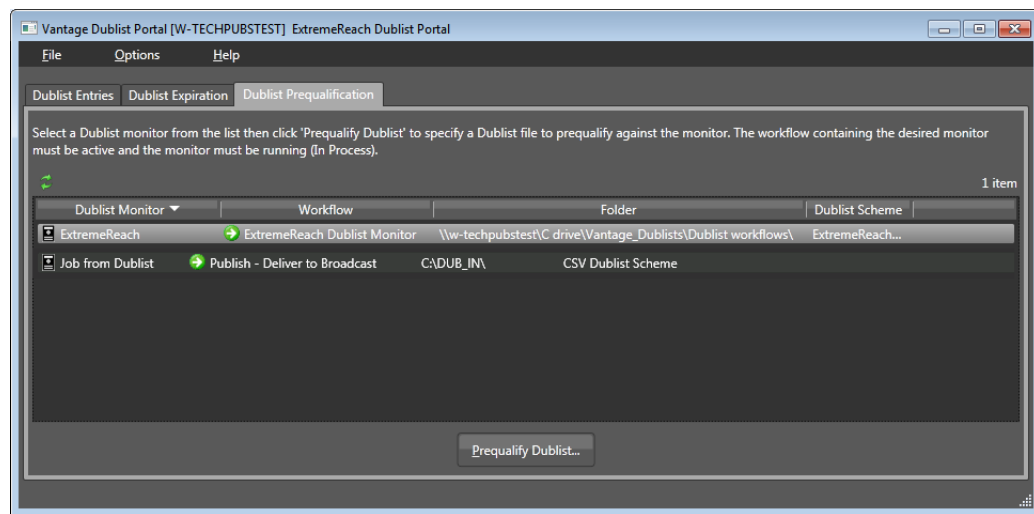
Click Now to expire the dublist immediately; click In and specify the amount of time to wait before expiring the dublist.

## Pre-qualifying Dublists

**Note:** Dublist pre-qualification is provided only in the Dublist Portal Windows client.

The Pre-qualify Dublist button enables you to verify that dublists of each type and format can be detected and processed correctly by the Dublist action and scheme you've implemented in the workflow.

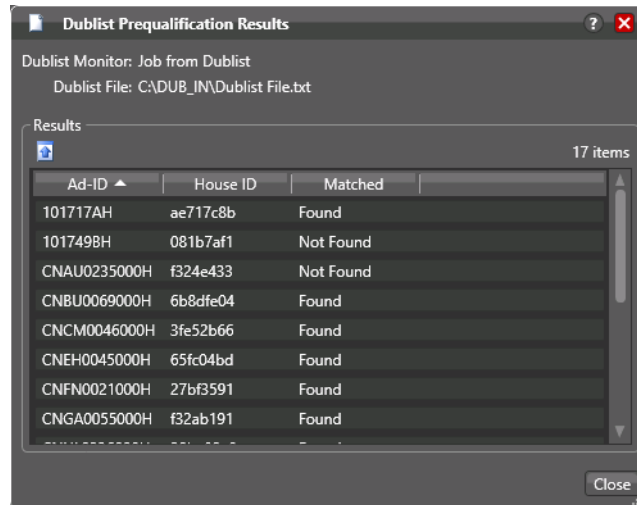
Click the Dublist Pre-qualification tab to display a list of dublist monitors (each monitor is instantiated by an activated workflow starting with a Dublist action) that are running in workflows accessible in the current configuration.



To pre-qualify a dublist against the scheme used in this monitor, follow these steps:

1. Select a monitor from the list.

2. Click the Pre-qualify Dublist button to browse and select a sample dublist to test.  
Dublist Portal displays the Dublist Pre-qualification Results dialog:



The dialog lists the Ad ID and House ID of each item in the dublist, and whether the asset was found or not, per the scheme you implemented.

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**Note:** If you have already processed one or more ads/other assets in an ingest workflow and registered them in a catalog, you can use the Matched column to determine if your extraction and scheme are working correctly.

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Verify that the values are correct and whether the matched information is also correct. If not, modify your scheme definition in the Management Console or adjust the dublist data specification to match the scheme and retry.

# Dublist Portal Windows Program Menus

The Dublist Portal menus are File, Option, and Help. These menus are described below:

## File Menu

The File menu includes these options:

- *Change Vantage Domain*—opens a Select Vantage Domain window, allowing you to select the domain you want to connect to. Connection Settings at the bottom allow you to enter a Login and Password for the selected domain database. (The default login and password are auto-filled and may be sufficient unless they have been changed by your administrator.) If your domain isn't listed, click *My Vantage Domain isn't listed* to open a field for entering the IP address of the domain server.
- *Recent Domains*—displays a list of recently-connected domains, if any.
- *Change Vantage User*—opens the Vantage Domain Login dialog. Enter your Vantage domain username and password. (Change Vantage User and Change Password are available only if you check Enable User Administration in the Vantage Management Console Settings & Options menu.)
- *Change Password*—opens a Set Password dialog, allowing you to change your password. Enter the new password in both fields and click OK. (This feature is available only if User Administration is enabled in the Management Console.)
- *Change/Reload Application Configuration*—opens the Select Configuration dialog, allowing you to select or reload a Dublist Portal configuration created or changed using the Vantage Management Console. Click the configuration you want, and click OK.

## Options Menu

- *Restore/Hide Tips & Warnings*—select Restore to turn on context-sensitive tool tips; select Hide to turn them off.
- *Prompt for Login Next Time Application is Launched*—when selected, forces the user to log in each time the program is started; otherwise remembers the last authorized user to log in.
- *Add Header to CSV Export Files*—when selected, adds a header row to exported CSV files.

## Help Menu

- *Contents*—opens the Vantage built-in documentation to the table of contents.
- *Index*—opens the Vantage built-in documentation to the index.
- *Search*—opens the Vantage built-in documentation to the search field.
- *Online Help*—opens the Vantage online (Web-based) help documentation.
- *About*—opens an About Vantage Dublist Portal dialog showing the version and data; click More to open built-in documentation or OK to close.



# Dublist Portal Web App Commands and Menus

The Dublist Portal menus are displayed in two places:

- *General commands*—upper right-hand corner of the window.
- *Menus*— in the Menu panel on the left. They include Dublist Configurations, Dublist Portal, and Help.

This table describes the menu selections and commands in the title bar in the Web client.

Menu	Selection	Description
Title bar options	Change Password	Opens a Set Password dialog, allowing you to change your password. Enter the new password in both fields and click OK.
	Logout	Log out the current Vantage user and displays the Dublist Portal Login dialog, so you can log back in under another user. Enter your Vantage domain username and password.
	Change Domain	Opens a Select Vantage Domain window, allowing you to select the domain you want to connect to. Connection Settings at the bottom allow you to enter a Login and Password for the selected domain database. (The default login and password are auto-filled and may be sufficient unless they have been changed by your administrator.) If your domain isn't listed, click <i>My Vantage Domain isn't listed</i> to open a field for entering the IP address of the domain server.
Dublist Configurations menu	<Current Configuration>	Displays the list of configurations, highlighting the name of the current configuration in use. Click to reload any configuration, picking up any changes to the configuration since it was last loaded.
Dublist Portal menu	Dublist Entries	Displays the Dublist Entries panel, populated with the table of current dublists.
	Dublist Expiration	Displays the Dublist Expiration panel, populated with the table of current dublists, which you can select and manually expire.

Menu	Selection	Description
Help menu	About	Select to display Workflow Portal product version information.
	Help Documentation	Click this entry to toggle the display of the submenu.
	User Guide	Click to display the PDF version of this guide in a separate browser window.
	Web Help	Click to display the HTML version of this guide in a separate browser window.
Dublist Configurations menu	<Current Configuration>	Displays the name of the current configuration in use. Click to reload the configuration, picking up any changes to the configuration since it was last loaded.

# Troubleshooting Dublist Portal

When opening Dublist Portal for the first time, depending on the design of your network and the location of your workstation and Vantage server, the Domain login dialog may not display your domain. If this is the case, you can log in by using the name or IP address of the server.

When you change domains or configurations, you may also encounter these problems:

- No Configurations Available...

Dublist Portal displays this error when you log in to a domain where no Dublist Portal configurations are defined or where you do not have access to any of the defined configurations.

Contact your Vantage domain administrator.

- No session licenses available for this application...

The domain you logged on to is not licensed for running Workflow Portal, or available licenses are all in use. Dublist Portal will operate in unlicensed/demo mode until a TrafficManager license becomes available.

Contact your Vantage domain administrator.

- Problem communicating with database—could not find stored procedure Select-SessionsByExecution...

This error displays when Dublist Portal is attempting to display a list of configurations from the selected domain, but the version of the domain is not compatible with your client. Contact your Vantage domain administrator to upgrade the Dublist Portal program on your computer.



# Creating Dublist Portal Configurations and Dublist Schemes

This chapter explains how to create Dublist Portal configurations, and create dublist schemes to use in TrafficManager. Both of these are created and set up in the Vantage Management Console.

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**Note:** Features in products for which you don't have a license are disabled and indicate that you need a license to use them.

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The following topics are presented in this chapter:

- [Creating Dublist Portal Configurations](#)
- [Creating Dublist Schemes](#)

## Creating Dublist Portal Configurations

The Dublist Portal provides operators and managers with the ability to view and manage TrafficManager dublists. Using the Vantage Management Console's Dublist Portal configuration panel, you create *configurations*, which define the features and information an operator uses and sees when using the Dublist Portal.

You can create as many configurations as needed to implement your dublist processing. Before you can use the Portal, you must create at least one configuration.

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**Note:** For a comprehensive overview of the Dublist Portal program, see [Using Dublist Portal](#) in the *Vantage TrafficManager User Guide*.

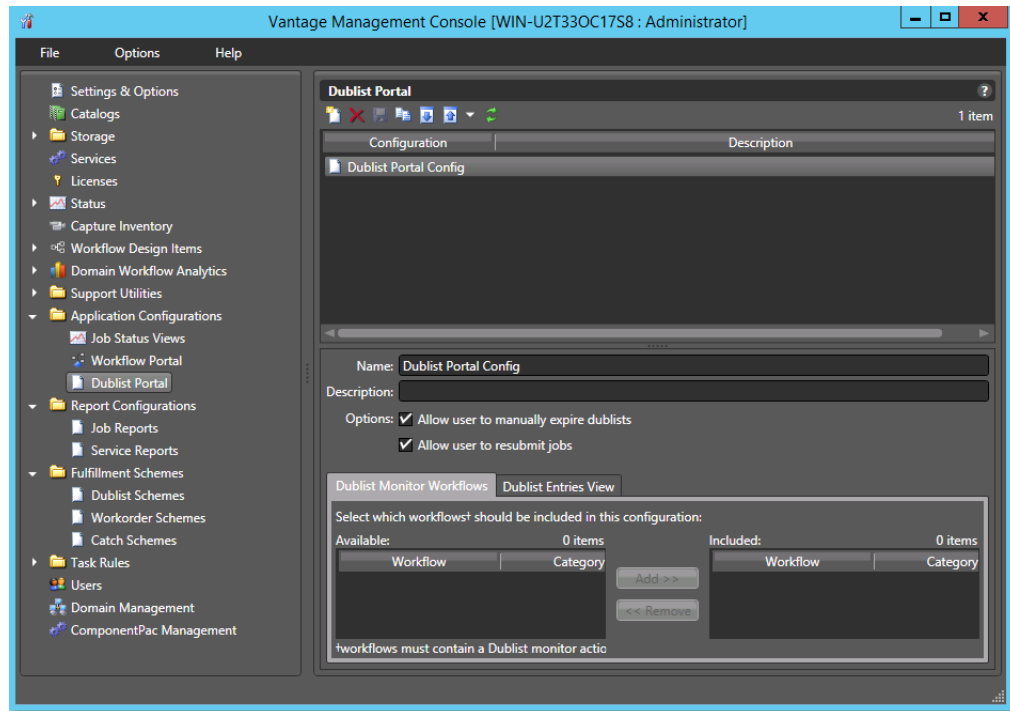
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The following topics provide information on Dublist Portal configuration tasks:


- [Displaying the Dublist Portal Configuration Panel](#)
- [Refreshing the Configuration List](#)
- [Creating a New Configuration](#)
- [Renaming a Configuration](#)
- [Duplicating a Configuration](#)
- [Deleting a Configuration](#)
- [Setting Options and Choosing Columns](#)
- [Configuring Permitted Users](#)
- [Specifying Workflows](#)
- [Exporting and Importing Configurations](#)

## Displaying the Dublist Portal Configuration Panel

To display the Dublist Portal configuration panel in the Management Console, select Application Configurations > Dublist Portal in the panel on the left:





## Refreshing the Configuration List

When you select the Dublist Portal configuration panel, the Management Console displays the current configurations list and the current workflows. If another administrator is making changes (such as adding Vantage users), you must refresh the display to see those changes. To refresh the display, click the Refresh button .


## Creating a New Configuration

To create a new configuration, do the following:

1. Click the New Configuration button  (or right-click in the empty configuration list space and select New Configuration).
2. Enter a name in the Name field after the new configuration appears in the Configuration list.
3. Optionally, enter a description of the configuration in the Description text box.
4. Click the Save button .
5. Proceed to [Setting Options and Choosing Columns](#) to set up the configuration per your requirements.



## Renaming a Configuration

To rename a configuration, do the following:

1. Select the configuration to rename.
2. In the Name text box, enter a new name for the configuration.
3. Click the Save button .


## Duplicating a Configuration

To duplicate a configuration, do the following:

1. Select the configuration to duplicate.
2. Click the Duplicate button  (or right-click and select Duplicate).
3. In the Name text box, enter a name for the duplicate configuration.
4. In the Description field, enter a description for the configuration (optional).
5. Click the Save button .

## Deleting a Configuration

To delete a configuration, do the following:

1. Select the configuration to delete. (Ctrl-click or Shift-click to select multiple configurations.)
2. Click the Delete button  (or right-click and select Delete).
3. When the confirmation dialog appears, click OK.



## Setting Options and Choosing Columns

You can set Dublist Portal configuration options and columns below the Name and Description fields.

### Setting Your Options

To set these options, do the following:

1. Select the configuration you want to modify.
2. *Allow Users to Manually Expire Dublists*—Check to enable users to expire a dublist dynamically, as needed. Clear the checkbox to prevent users from ever manually expiring a dublist.
3. *Allow User to Resubmit Jobs*—Check to enable users to resubmit jobs as required. Clear the checkbox to prevent users from resubmitting jobs.

### Displaying Selected Columns

The Columns selections enable you to include or exclude these columns: Dublist, Folder, Workflow, Catalog, Submitted, Ad-ID, House ID, Matched, and Status. The columns you select determine which columns and associated information are visible when using this configuration in the Dublist Portal.

To define which columns display in the Dublist Entries view list in a configuration, do the following:

1. Select the configuration you want to modify.
2. Click on the Dublist Entries View tab.

Name: Dublist Portal Config

Description:

Options: ☒ Allow user to manually expire dublists  
☒ Allow user to resubmit jobs

Permitted Users | Dublist Monitor Workflows | **Dublist Entries View**

Select which columns should appear in the Dublist Entries view list:

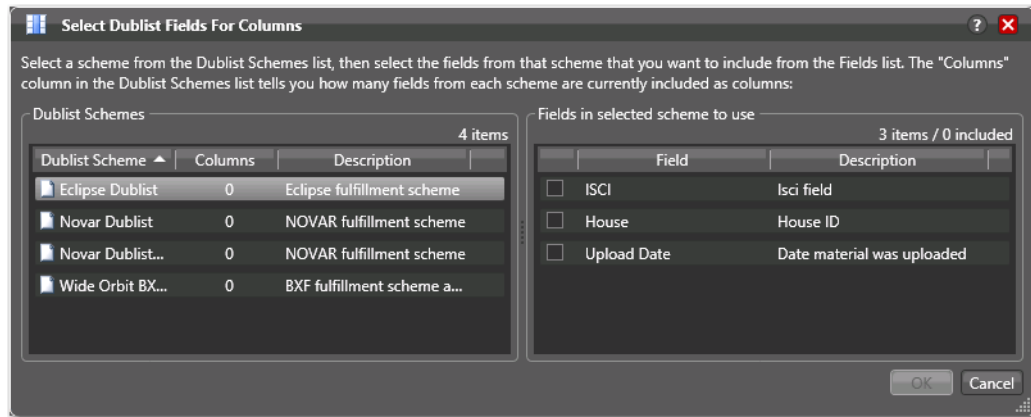
☒ Dublist ☒ Folder ☒ Workflow ☒ Catalog ☒ Submitted ☒ Ad-ID ☒ House ID ☒ Matched ☒ Status


Configure additional columns in the list by selecting dublist scheme fields and arrange them in the order they should be shown:

Field	Dublist Scheme	Field Description
0 items		

3. Check the boxes for columns you want to display in this configuration, and uncheck them to hide them. The only current option allows the user to manually expire dublists in addition to any automatic expiration.

4. You can also add other columns, as required for your application. To add other columns: For each column to add, click the New Column icon. The Management Console displays the Select Dublist Fields for Columns dialog:



5. Select a scheme from the list to display the available fields on the right. Then check the fields that you want to add. (The value in the Columns row of the Dublist Schemes table indicates how many fields are currently included).
6. Click the Save button .

## Configuring Permitted Users

When user administration is enabled, you can set a configuration to be available to individual users or all users (Public).

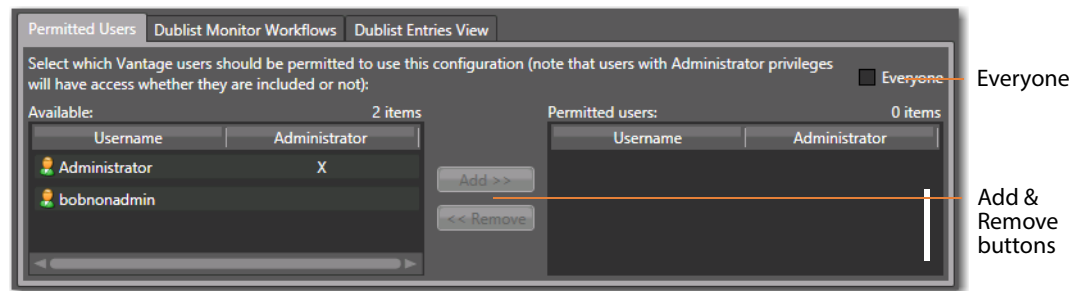
If you plan to use the Dublist Portal Web application, you must enable user administration to provide a layer of security for Web application usage.



**Note:** The Permitted Users tab is displayed only if User Administration is enabled in Settings & Options.

Users with administrative privileges always have access to configurations.

To specify which Vantage users can access a configuration, do the following:

1. Select the configuration you want to update.
2. Click the Permitted Users tab (see the figure below).



3. To make the selected configuration available to all Vantage users, do the following:
  - a. Check the Everyone check box.
  - b. Click the Save button .
4. To make the configuration available to certain Vantage users, do the following:
  - a. Clear the Everyone check box.
  - b. In the *Available* panel, select the users who should have access, and click Add.
  - c. In the *Permitted Users* panel, select the users who *should not* have access, and click Remove.
  - d. Click the Save button .

## Specifying Workflows

Use the Dublist Monitor Workflows tab to specify which workflows are accessible to the Dublist Portal operator. The operator can submit jobs to these workflows directly from Dublist Portal.

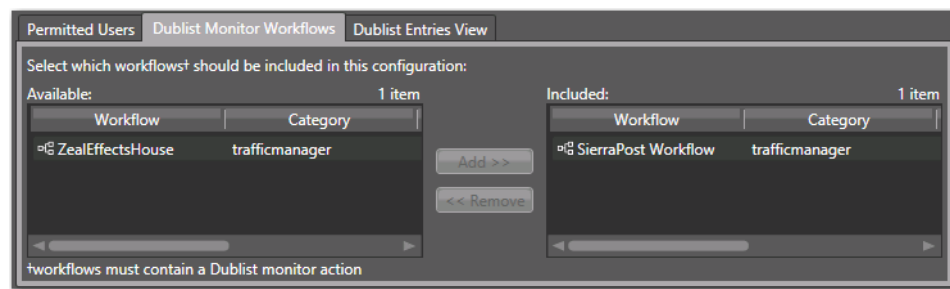
---


**Note:** Only workflows beginning with a Dublist action are usable in Dublist Portal.

---

To specify which workflows are accessible in a configuration, do the following:

1. Select the configuration to modify.
2. Click the Dublist Monitor Workflows tab (as shown in the figure, below).




3. Select a workflow in the Available panel and click Add to add it to the configuration. Click a workflow in the Included panel and click Remove to delete it.
4. Click the Save button .

## Exporting and Importing Configurations

Vantage allows you to export configurations to XML files, which you can then use to import the same configurations into another Vantage domain.

To export configurations, do the following:

1. Select the configuration(s) to export. (Ctrl-click or Shift-click to select multiple configurations.)
2. Click the Export button  to export the configurations (or right-click and select *Export*, or select *Export all* from the Export button drop down menu).
3. Use the file system dialog to save the exported configurations.


The default file name is the configuration name, but you can change the file name.

---

**Note:** Changing the name of the XML file does not change the name of the configuration defined by the XML file.

---

To import configurations, do the following:

1. Click the Import button .
2. Use the file system dialog to locate and select the configuration file to import, then click Open.

---

**Note:** If you try to import a configuration that is already in this Vantage domain, Vantage prompts you to cancel or confirm replacement.

---

## Creating Dublist Schemes

Dublist schemes contain dublist parsing patterns you can create for each type of dublist you plan to use with Vantage TrafficManager. Each scheme provides the specification that Traffic Dublist actions use in a workflow for extracting the correct data fields from the dublist you are using for a particular TrafficManager system.

The advantage of dublist schemes is that you don't have to set up the parsing pattern for the dublist each time you use a Dublist action in a workflow. Instead, you set it up once as a scheme in the Dublist Schemes panel in the Management Console and then specify that scheme by name in a Dublist action. Different types of broadcast automation systems use different dublist formats, so you can create a scheme for each type. The dublist files themselves can consist of comma-separated values (CSV), column-based files, and formats provided by supported dublist databases.

When configuring a Dublist action, you can use one of the default dublist schemes provided in Vantage or create one or more dublist schemes to meet your requirements.

You can set up a scheme to extract any data fields you need so that TrafficManager can find and process media files and include their metadata. For example, you might extract the Advertiser, Title, Ad-ID/ISCI code, and Duration and pass those along to the traffic workflow for further action.

- [Displaying the Dublist Schemes Panel](#)
- [Creating a New Dublist Scheme](#)
- [Renaming a Scheme](#)
- [Duplicating a Scheme](#)
- [Deleting a Scheme](#)
- [Configuring Dublist Scheme Fields](#)

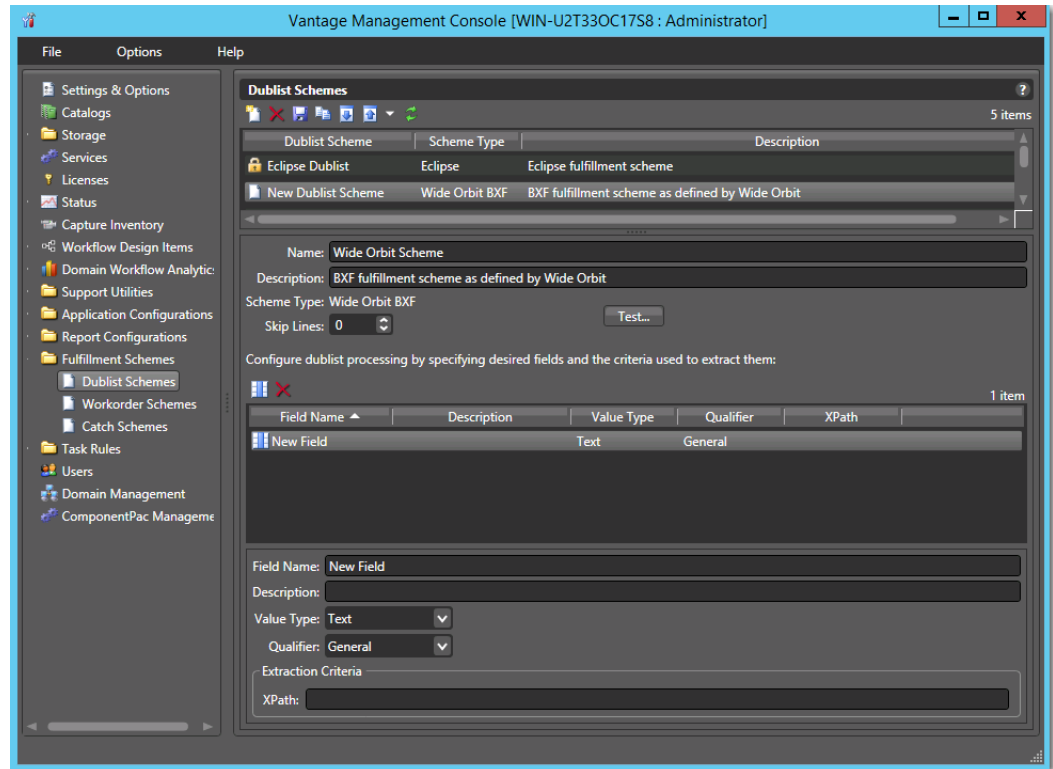
---

**Note:** If you are using an XML-based dublist (such as BXF, Eclipse, or Novar), the dublist must be saved with the appropriate encoding relative to the content in the file. For example, If your dublist contains non-ASCII characters (such as German or French), you must save the file with UTF-16 encoding. In XML files, the encoding type is generally indicated in the header line: `<?xml version="1.0" encoding="utf-16"?>`.

---


## Displaying the Dublist Schemes Panel

To view the Dublist Schemes panel in the Management Console, open Fulfillment Schemes in the side panel and select Dublist Schemes. The Vantage Management Console displays the panel shown in the figure below.




## Creating a New Dublist Scheme

To create a new dublist scheme, follow the steps below. At a minimum, each dublist scheme requires an Ad-ID/ISCI qualifier and a house qualifier.


1. Click the *Create a new dublist scheme* button  (or right-click in the empty schemes list space and select New Dublist Scheme).
2. Choose Column-based | CSV | Eclipse | Wide Orbit BXF in the dialog that appears.
3. Enter a scheme name in the Name field.

When naming your dublist schemes, you probably want to use the type of dublist in the name, so a scheme for BXF dublists might be called “BXF Dublist Scheme” to make it easy to identify.

4. Optionally, enter a description of the scheme in the Description text box.
5. *Skip Lines*—Enter the number of header lines to skip at the top of a file before dublist parsing starts.
6. Click the Save button .



## Renaming a Scheme

To rename a scheme, do the following:

1. Select the scheme to rename in the scheme list.
2. In the Name text box, enter a new name for the scheme.
3. Click the Save button .


## Duplicating a Scheme

To duplicate a dublist scheme, do the following:

1. Select the scheme to duplicate.
2. Click the Duplicate button  (or right-click and select Duplicate).
3. In the Name text box, enter a name for the duplicate scheme.
4. In the Description field, enter a description for the scheme (optional).
5. Click the Save button .

## Deleting a Scheme

To delete a dublist scheme, do the following:

1. Select the configuration to delete. (Ctrl-click or Shift-click to select multiples.)
2. Click the Delete button  (or right-click and select Delete).
3. When the confirmation dialog appears, click OK.



## Configuring Dublist Scheme Fields

You can set up your dublist scheme fields using the panel below the field Name and Description. These options determine which data columns, lines, and fields in a particular type of dublist are extracted and forwarded for use in TrafficManager workflows and which are ignored. Typical data to extract from a dublist might include the advertiser, the media title, the Ad-ID/ISCI code, the length of the media in hours/minutes/seconds/frames, and so on.

The following figure shows a typical dublist with data arranged in columns, each of which will be described and extracted by a field in your dublist scheme.

Typical Dublist

Order	Advertiser	Order Complete Date	Type	Ad-ID	Title	Length
1494696	JCPenney	10/17/2012 21:17:49	Video	PJCP8375	WK39 Sale	00:00:15:00
1495125	FedEx	10/17/2012 23:37:27	Video	FJFX-6383	PREVIOUS	00:00:30:01
1495707	Dodge	10/18/2012 20:45:04	Video	CDA-7006B	ROADTRIP	00:00:30:00
1496038	Mercedes	10/19/2012 21:56:32	Video	DZNA-6347	JCKHAMMER	00:00:30:00
1495935	Advance	10/20/2012 1:47:27	Video	AAPT0751	LOW PRICE	00:00:30:00
1495935	Advance	10/20/2012 1:47:27	Video	AAPT0753	LOW PRICE	00:00:15:00

## Creating a Field List


The field list shows the fields you create as part of a scheme. You can add and delete fields as needed. Each field in a scheme is created and configured to extract data from a particular element in the dublist when a dublist is parsed. The data extracted from a dublist is published as a variable in the job.

---

**Note:** Given that various types of dublists are in use (column-based | CSV | Eclipse | Wide Orbit BXF), how you define the field varies by type.

---

### Adding New Fields

Click Add Field  to add a new data field to extract from dublists. Specify the following information:

*Field Name*—Enter a name for the field.

*Description*—Optionally, enter a description of the field.


*Value Type*—Enter the type of value to search for and extract from the field. Available values are True/False, Integer Number, Size, Decimal Number, Date, Text, Path, Timecode, and Mail Address. See the following table for descriptions of these values.

The following table presents Value Type descriptions.

Value Type	Description
True/False	True or false
Integer Number	Signed 32-bit integer (decimals are rounded)
Size	Signed 64-bit integer (decimals are rounded)
Decimal Number	Double-precision floating point decimal number
Date	Date specified according to local standards: MM/DD/YYYY or DD/MM/YYYY
Text	Any text string; use when your data does not fit any other value type
Path	Windows or UNC path. Must follow this pattern: <i>[Drive Letter]:\</i> Or this pattern: <i>\\Device\path</i>
Timecode	Timecode value in this pattern: HH:MM:SS:FF@FR HH is hours, MM is minutes, SS is seconds, FF is the frame number, and @FR is the frame rate. Examples: 00:00:30:04 or 01:00:30:00@29.97 or 00:02:30:00@25. A frame rate of 29.97 is assumed if not specified.
Mail Address	Email address consisting of an @ sign with a string before and after—email@domain. Example: name@telestream.net

**Qualifier**—Set to the type of field being extracted: an Ad-ID/ISCI identifier, a House ID, or other General qualifier.

Next, specify extraction criteria. How you set it up depends on the type of dublist you're working with. Proceed to the topic appropriate to your type of scheme.

After entering your selections for each item described previously, click the Save button  to save the field and scheme.

### Specifying Column-based Extraction Criteria

**Starting Column**—Set this to the number of the column in which to start extracting data, starting at column 1. That is, counting from the left margin, how many characters to the right should the parser count before starting to extract data for this field?

**Width**—Set this to the width of the data to be extracted. That is, counting from the starting column (above) how many characters to the right should the parser count before ending extraction of the field?

**Stop at white space**—Check this option to stop parsing the Ad-ID/ISCI column at the first space character. That is, if this field contains multiple words or character groups separated by spaces, parsing stops after the first group.

### **Specifying CSV Extraction Criteria**

*CSV Index*—Specifies the number of the column in which to start extracting data. This value is 1-based; the first column is identified as column 1.


### **Specifying Eclipse Extraction Criteria**

*CSV Index*—Specifies the number of the column in which to start extracting data. This value is 1-based; the first column is identified as column 1.

### **Specifying Wide Orbit BXF Extraction Criteria**

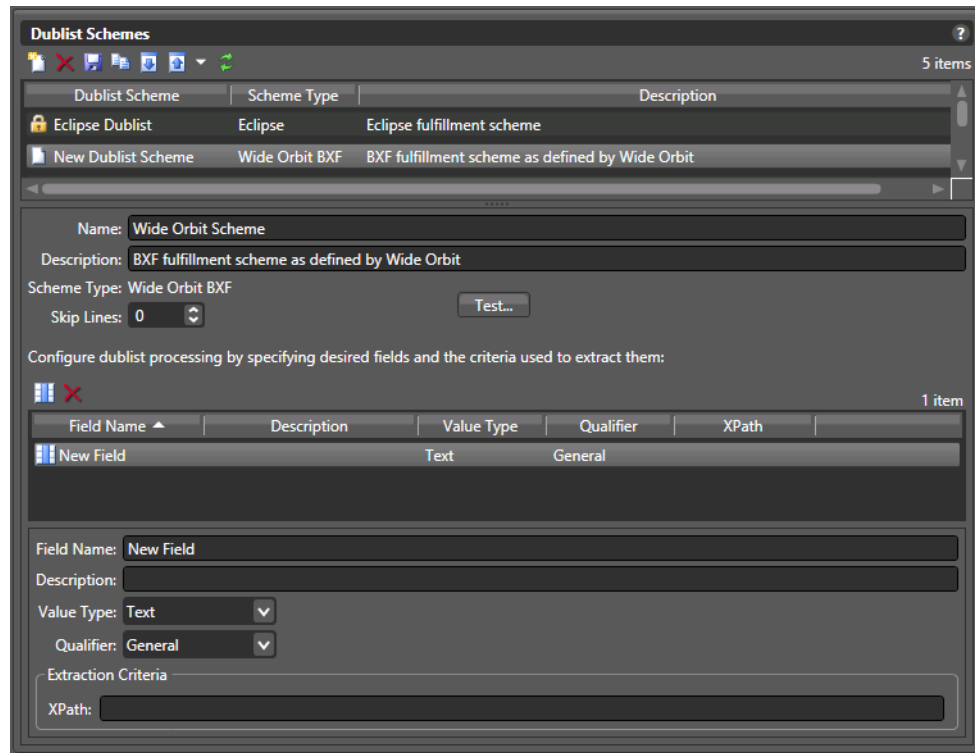
*XPath*—indicates the field/node position in the hierarchy of the XML file. The XPath begins with the root node, followed by any additional nodes in the hierarchy, leading to the node being defined. For example: /ROOT/Node\_Level\_1/Node\_Level\_2.

### **Deleting Fields**

Click Delete Field  to delete the highlighted field from the field list.

## Testing Dublist Portal Schemes

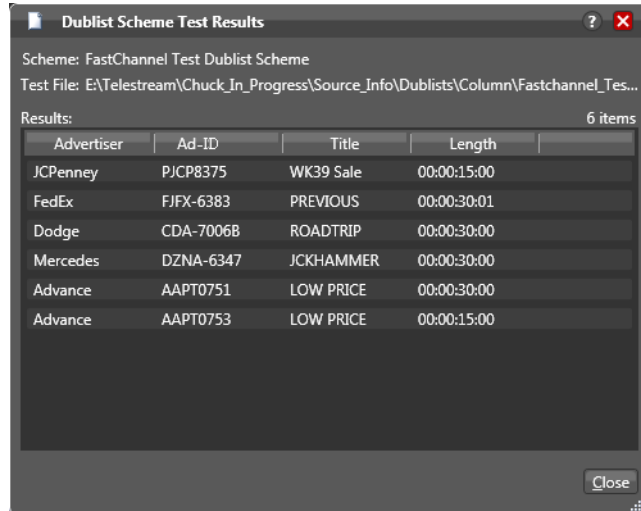
The Test button in the center of the Dublist Schemes panel enables you to test a scheme on actual dublists to verify that the scheme works correctly—that the dublist has been parsed correctly—extracting the metadata that the workflow requires.



To test a scheme, follow these steps:

1. Select a dublist scheme in the scheme list.
2. Press the Test button.

3. Examine the Test Results table for proper extraction: verify that each field contains the correct data, as shown in the figure below.



The screenshot shows a window titled "Dublist Scheme Test Results". Inside, it displays the following information:

- Scheme: FastChannel Test Dublist Scheme
- Test File: E:\Telestream\Chuck\_In\_Progress\Source\_Info\Dublists\Column\Fastchannel\_Tes...
- Results: 6 items

Advertiser	Ad-ID	Title	Length
JCPenney	PJCP8375	WK39 Sale	00:00:15:00
FedEx	FJFX-6383	PREVIOUS	00:00:30:01
Dodge	CDA-7006B	ROADTRIP	00:00:30:00
Mercedes	DZNA-6347	JCKHAMMER	00:00:30:00
Advance	AAPT0751	LOW PRICE	00:00:30:00
Advance	AAPT0753	LOW PRICE	00:00:15:00

A "Close" button is visible at the bottom right of the window.

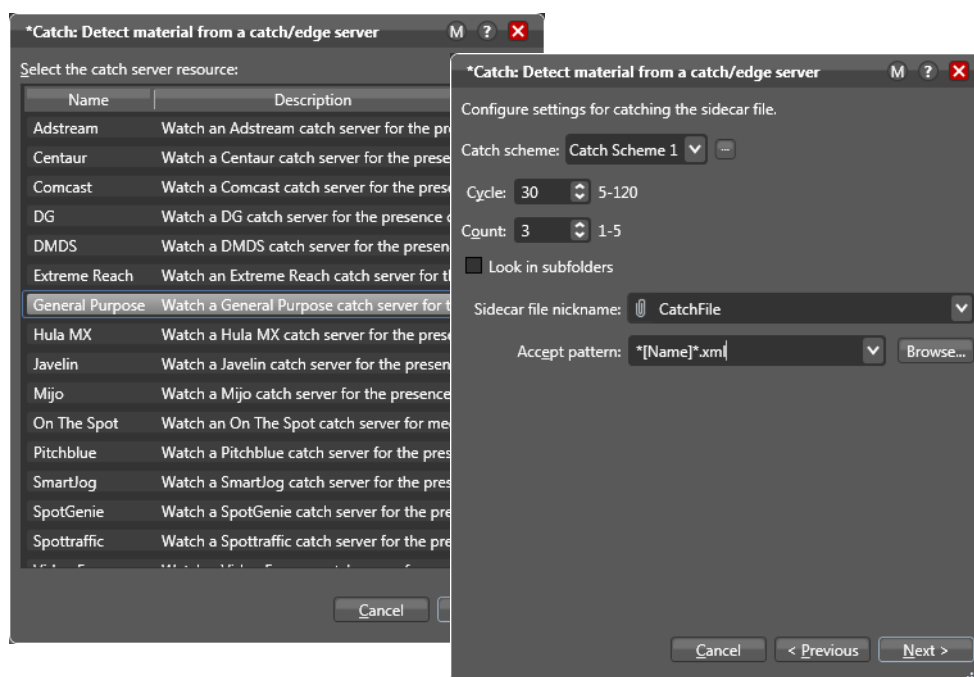
4. Adjust each field of the scheme until a test produces correct output.



# Configuring Catch Server Schemes

This chapter explains how to use the Vantage Management Console Catch Schemes feature. The Vantage Catch action includes many common catch server definitions, as shown in the figure below. The Catch Schemes feature also gives you the flexibility to create your own custom catch server definitions from a general purpose scheme type.

You implement a scheme in a Catch action (in Workflow Designer) by selecting a specific type (or general purpose) catch server and then selecting the scheme that you want to use.



A catch scheme allows Vantage to parse XML sidecar files accompanying ad media coming into a watched catch server and pass the sidecar metadata along with the media to other actions for processing in a Vantage workflow.

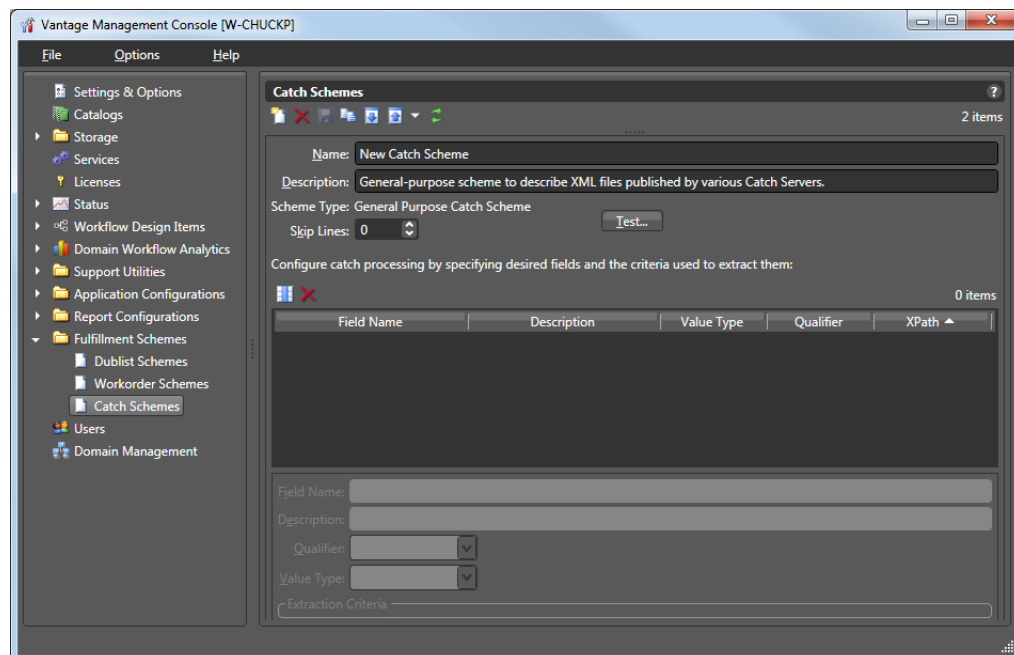
**Note:** Sidecar XML files must be valid, properly-formatted XML (for example, an embedded ampersand or other reserved/escape sequence characters in a value), otherwise it can not be interpreted by TrafficManager and no job will be submitted.

Using the Vantage Management Console Catch Schemes configuration window, you can create *configurations*, which define the information users see when configuring a General Purpose Catch action.

- [Displaying the Catch Schemes Configuration Panel](#)
- [Creating a New Configuration](#)
- [Renaming a Configuration](#)
- [Duplicating a Configuration](#)
- [Deleting a Configuration](#)
- [Setting Options and Defining Fields](#)
- [Exporting and Importing Configurations](#)

## Displaying the Catch Schemes Configuration Panel



To view the Catch Schemes configuration window in Vantage Management Console, open Fulfillment Schemes in the side panel and select Catch Schemes. The Vantage Management Console displays the Catch Schemes configuration window shown here.






## Creating a New Configuration

To create a new configuration, do the following:

1. Display the Catch Schemes configuration window.
2. Click the Create a New Configuration button  (or right-click in the empty configuration list space and select New Configuration).
3. Enter a name in the Name field after the new configuration appears.
4. Enter a description of the configuration in the Description text box (this is optional).
5. Click the Save button .
6. After you create a new configuration, configure it by proceeding to [Setting Options and Defining Fields](#).



## Renaming a Configuration

To rename a configuration, do the following:

1. Display the Catch Schemes configuration window.
2. Select the configuration to rename in the Configuration list.
3. In the Name text box, enter a new name for the configuration.
4. Click the Save button .


## Duplicating a Configuration

To duplicate a configuration, do the following:

1. Display the Catch Schemes configuration window.
2. Select the configuration to duplicate.
3. Click the Duplicate button  (or right-click and select Duplicate).
4. In the Name text box, enter a name for the duplicate configuration.
5. In the Description field, enter a description for the configuration (optional).
6. Click the Save button .

## Deleting a Configuration



To delete a configuration, do the following:

1. Display the Catch Schemes configuration window.
2. Select the configuration to delete. (Ctrl-click or Shift-click to select multiple configurations.)
3. Click the Delete button  (or right-click and select Delete).
4. When the confirmation dialog appears, click OK.

## Setting Options and Defining Fields

You can set Catch Schemes configuration options and define fields for catch processing below the Name and Description. The fields area lets you add a new field for each node in the XML catch server configuration file that you want to include. The XML file and your catch server definition can include any fields you prefer, but these three fields are required for each catch scheme: Ad-ID/ISCI, Start Time, and Play Length.

To define fields in a configuration, do the following:

1. Display the Catch Schemes configuration window.
2. Select the configuration you want to modify from the Configuration list.
3. In the fields table toolbar, click the New Field button  to add a field.
4. Enter a field name and description, usually the name of a node in the XML file. (A node is text surrounded by pointed brackets, such as <ISCI\_CODE>.)
5. Select a Qualifier from the drop-down menu to define the function of the field/node. At a minimum, you must include one Ad-ID/ISCI, one Start Time, and one Play Length field.
6. Select a Value Type for the field. This specifies what kind of data the field will contain, such as text, timecode, numbers, paths, etc.
7. Enter an XPath, which indicates the field/node's position in the hierarchy of the XML file. The XPath begins with the root node, followed by any additional nodes in the hierarchy, leading to the node being defined.  
For example: /ROOT/Node\_Level\_1/Node\_Level\_2.
8. Click the Save button .
9. Click the Test button above the field area, and browse for the XML file you are using to define your catch server. If you successfully defined the fields, the Test Results window opens and shows the fields as headings with the correct data from the XML file.

### Field Options

Each field in a scheme is created and configured to extract data from a particular node in the catch server definition XML file when the file is parsed. The following options are available for defining a field:

*Skip Lines*—Enter the number of header lines to skip at the top of a file before parsing starts.

*Add New Field*—Click Add Field  to add a new data field.

*Delete Field*—Click Delete Field  to delete the highlighted field from the field list.


*Field Name*—Enter a name for the field.

*Description*—Enter a description of the field.

*Qualifier*—Set to the type of field being extracted: an Ad-ID/ISCI identifier, Start Time, Play Length, or a Variable.

**Value Type**—Enter the type of value to search for and extract from the field. Available values are True/False, Integer Number, Size, Decimal Number, Date, Text, Path, Timecode, and Mail Address. See the table below for descriptions of these values.

**Extraction Criteria, XPath**—Set this to the path leading to the node defined by the field. Start at the root level and descend to desired node: /ROOT/Node1/Node2.

After entering your selections for each item described previously, click the Save button  to save the field and scheme.

Use the Test button to view the Test Results window, showing your catch server definition.

The following table presents Value Type descriptions.

Value Type	Description
True/False	A true or false value
Integer Number	A signed 32-bit integer (decimals are rounded)
Size	A signed 64-bit integer (decimals are rounded)
Decimal Number	A double precision floating point decimal number
Date	A date specified according to local standards: MM/DD/YYYY or DD/MM/YYYY
Text	Any text string; use this when your data does not fit any other value type
Path	A valid Windows or UNC path. Must follow this pattern: <i>[Drive Letter]:\</i> Or this pattern: <i>\\Device\path</i>
Timecode	A video timecode value in this pattern: HH:MM:SS:FF@FR HH is hours, MM is minutes, SS is seconds, FF is the frame number, and @FR is the frame rate. Examples: 00:00:30:04 or 01:00:30:00@29.97 or 00:02:30:00@25. A frame rate of 29.97 is assumed if not specified.
Mail Address	A valid email address consisting of an @ sign with a string before and after—email@domain. Example: name@telestream.net

## Testing Schemes

The Test button in the center of the Catch Schemes window lets you test your schemes on actual catch server definition files to verify that the scheme works correctly.

To test a scheme, follow these steps:

1. When you finish defining a catch scheme, press the Test button.
2. Examine the Test Results display for a clean output as shown in the figure below.  
The figure shows the defined catch scheme, the XML data to be parsed, and the test results.
3. Adjust each field of the scheme until a test produces a satisfactory output.

The screenshot shows the Vantage Management Console [W-CHUCKP] interface. The left sidebar contains a tree view with categories like Settings & Options, Catalogs, Storage, Services, Licenses, Status, Workflow Design Items, Domain Workflow Analytics, Support Utilities, Application Configurations, Report Configurations, Fulfillment Schemes (selected), Users, and Domain Management. Under Fulfillment Schemes, 'Catch Schemes' is selected.

The main window displays the 'Catch Schemes' configuration for 'Catch Scheme 1'. It includes fields for Name, Description, Scheme Type (General Purpose Catch Scheme), and Skip Lines (1). A 'Test...' button is visible. Below these fields is a table for configuring catch processing by specifying desired fields and criteria:

Field Name	Description	Value Type	Qualifier	XPath
ISCI_CODE		Text	Ad-ID/ISCI	/SPOT_MONITOR
PLAY_LENGTH		TimeCode	Play Length	/SPOT_MONITOR
START_TIME		TimeCode	Start Time	/SPOT_MONITOR

Below the table, there are fields for Field Name (ISCI\_CODE), Description, Qualifier (Ad-ID/ISCI), Value Type (Text), Extraction Criteria, and XPath (/SPOT\_MONITOR/ISCI\_CODE). A 'Test...' button is also present.

The 'Catch Scheme Test Results' dialog is open, showing the test results for 'Catch Scheme 1'. The test file is 'C:\Perforce\TW\Vantage\Domain\_Mgmt\_Guide\VDM\_6.3+SysAdm\_6.3+Graph...'. The results are displayed in a table:

TITLEDESC	ISCICODE	STARTTIME	PLAYLENGTH
MEMORIAL DA...	STTV1228022H	00:00:00:00	00:00:10:00

The dialog also shows the XML data being tested:

```
<?xml version="1.0" encoding="utf-8"?>
<SPOT_MONITOR>
  <TITLE_DESC>MEMORIAL DAY CC</TITLE_DESC>
  <ISCI_CODE>STTV1228022H</ISCI_CODE>
  <PRODUCT_DESC></PRODUCT_DESC>
  <PLAY_LENGTH>00:00:10:00</PLAY_LENGTH>
  <START_TIME>00:00:00:00</START_TIME>
  <COMPRESSION_LEVEL_CODE></COMPRESSION_LEVEL_CODE>
  <ENCODER_TYPE_DESC>SPOTTRAFFIC</ENCODER_TYPE_DESC>
  <OUTPUT_RATE></OUTPUT_RATE>
  <FILE_NAME>STTV1228022H.1xf</FILE_NAME>
  <FILE_SIZE>40141799</FILE_SIZE>
  <COPY_DATE></COPY_DATE>
  <ADVERTISER>SLEEP TRAIN</ADVERTISER>
  <AGENCY_VENDOR>ON TRACK ADVERTISING</AGENCY_VENDOR>
  <SPOT_TYPE></SPOT_TYPE>
  <MEDIA_DESCRIPTION></MEDIA_DESCRIPTION>
  <SUPPORT_EMAIL>operations@spottraffic.com</SUPPORT_EMAIL>
</SPOT_MONITOR>
```

## Refreshing the Catch Schemes List


In the Catch Schemes window, the Vantage Management Console displays the current list of catch schemes. If another administrator adds or changes schemes, you need to refresh the display to see those changes.

To refresh the display, click the Refresh button.

## Exporting and Importing Configurations

Vantage allows you to export catch scheme configurations to XML files, which you can then use to import the same configurations into another Vantage domain.

To export configurations, do the following:

1. Select the configurations to export. (Ctrl-click or Shift-click to select multiple views.)
2. Click the Export button  to export selected configurations (or right-click and select *Export*, or select *Export all* from the Export button drop down menu).
3. Use the file system dialog to save the exported configurations.


The default file name is the configuration name, but you can change the file name.

---

**Note:** Changing the name of the XML file does not change the name of the configuration in the XML file.

---

To import configurations, do the following:

1. Click the Import button .
2. Use the file system dialog to locate and select the configuration file to import, then click Open.

---

**Note:** If you try to import a configuration that is already in this Vantage domain, Vantage prompts you to cancel or confirm replacement.

---



# Commercial Production Workflows

The purpose of this chapter is to lead you through a series of TrafficManager workflows, starting first with simple building-block workflows and graduating to larger complete commercial production workflows.

These workflows are only examples and will vary considerably according to your specific commercial production requirements and in-house procedures. Where your commercial production practices vary from these examples, you can modify the workflows to meet your needs. These are the workflow topics presented:

- [Catalogs in TrafficManager Workflows](#)
- [Simplified Example TrafficManager Workflows](#)
- [Example TrafficManager System Workflows](#)

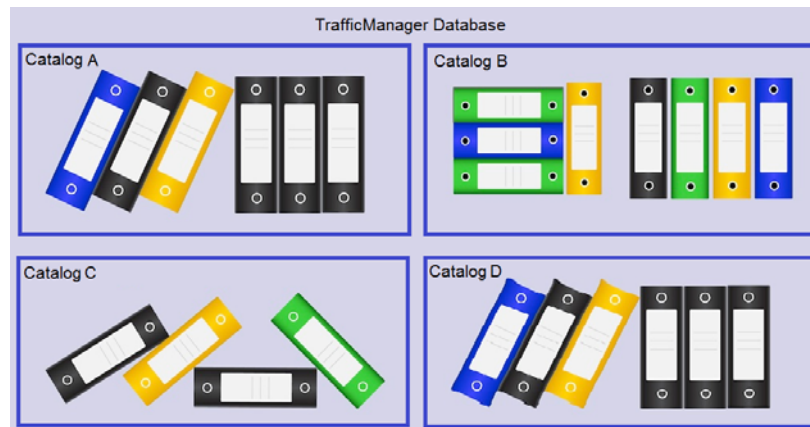
---

**Note:** Telestream Professional Services offers complete workflow consulting, system design and implementation solutions for Vantage and our other enterprise products, including TrafficManager systems. For information regarding professional services, contact your Telestream representative.

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## Catalogs in TrafficManager Workflows

Catalogs are a Vantage feature (as depicted in the figure below) that TrafficManager uses to hold information about media and metadata beyond the time of a job so that they can be reviewed or passed to other workflows.



Each time a workflow executes, it creates a job, and media (or other files associated with the workflow), plus metadata and other information about all the parts of a job are gathered together into a binder. Catalogs are essential as the overall organizing principle for storing binders from a particular workflow or multiple related workflows. Catalogs can also contain folders to provide subcategories for storing binders.

In the context of TrafficManager, commercials are processed and their binder registered into catalogs to create commercial inventories that operators can manage using the Workflow Portal. The binder created when a job registers a particular commercial into a catalog is named using the Ad-ID/ISCI code for that commercial.

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**Note:** In order for the Dublist action to find and process dublists, the binder name in the catalog must match the Ad-ID/ISCI code exactly. If this requirement is not observed in workflow design, the Dublist workflow will not find a matching Ad-ID/ISCI entry in the catalog, a job will not be submitted, and the Dublist Portal will show that a match is not found.

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You can review the binder in the Workflow Portal and resubmit the job for processing at any time until it expires. This is useful when a workflow requires a review and approval cycle. In this case, the commercial is received and registered into a catalog during the first run of the job. Then the operator reviews proxies and metadata, makes any desired changes, and approves the commercial. Approval consists of setting a variable in the workflow to “approved” or “passed” and resubmitting the job to mark the commercial ready to air and possibly also move it into an “Approved” catalog.



# Simplified Example TrafficManager Workflows

The following simple TrafficManager workflows can be thought of as building blocks for the more complex workflows that follow. In each case, the workflows shown are only examples. Your workflows will vary considerably depending on your processes. These examples are included in this section:

- [Example Workflow: Simple Ingest](#)
- [Example Workflow: Simple Review and Approval](#)
- [Example Workflow: Simple Dublist Processing](#)

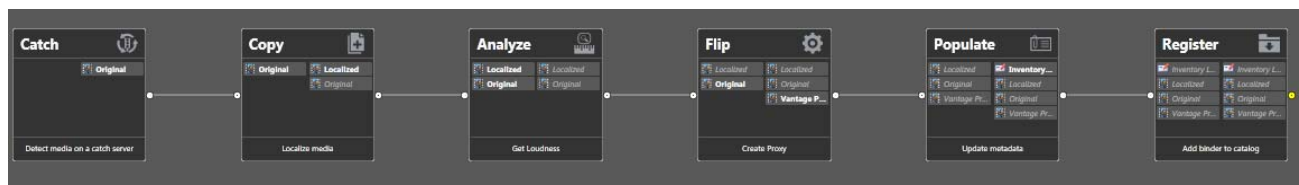
## Example Workflow: Simple Ingest

A simple ingest workflow is shown in the Simple Acquisition Workflow figure below. This workflow discovers media submitted to a catch server, creates an Inventory Label from metadata to describe the media, and registers the media with a catalog where it can be submitted to another workflow.

Here are the details:

- A Catch action monitors a catch server for incoming media and starts a job when new media arrives. This action also generates traffic variables such as these: ISCI, Agency, Advertiser, Product Name, Product, Category, Available Date, Expire Date, Trim Start, Trim End, Re-submitted.
- A Copy action copies the file to the local server.
- The Analyze action checks audio loudness for CALM Act compliance.
- A Flip action creates a proxy for previewing.
- A Populate action creates an Inventory Label using variables from the Catch action.
- The Register action registers the commercial in the catalog and a binder is created using the Ad-ID/ISCI code as the name. Any existing binders in the catalog with the same Ad-ID/ISCI can be automatically renamed with an appended version number by setting the conflict resolution to Rename Old. The expiration date is set to the Expire Date.

Media remains in the incoming folder and content information is available in the catalog but cannot be previewed in Vantage because no proxies are created. You can still preview by opening the original media in its folder (unless the media is stored on an FTP location, as with DG).

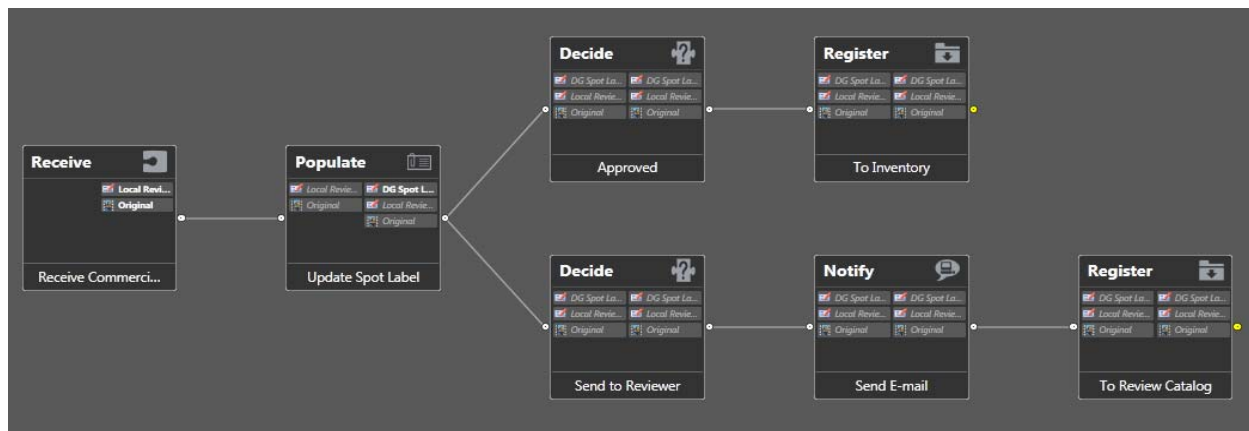


## Example Workflow: Simple Review and Approval

Workflows can contain a review and approval stage to ensure a person reviews each commercial before it is aired. One method for doing this is to create two catalogs—a Review Catalog and an Approved Catalog. In the workflow, you use Decide actions to send the commercial to one catalog or the other (see the Review and Approval Workflow figure below). These are the details:

- The workflow starts with a Receive action to accept a previously ingested commercial. A Receive action is used because it accepts jobs submitted from an external program, in this case, the Workflow Portal. The operator uses the Workflow Portal to receive, review, and resubmit a job.
- A Populate action sets a variable in the Spot Label or Inventory Label to true or false to indicate Approval Passed or Failed.
- Decide actions examine the approval variable and send the commercial to two separate Register actions that put it into the Review catalog if it needs to be reviewed (as indicated by the variable), or forward it to the Inventory catalog if it has been approved as ready for use.
- The Review branch includes a Notify action to email the reviewer that a review is required.

After reviewing and approving the commercial, the reviewer can reset the Approval variable in the label to Passed and resubmit the commercial to the workflow. This time the label causes the commercial to follow the Approved branch, and it is registered into the Approved Catalog where it becomes part of the ready-to-air inventory. A separate dublist workflow can pick it up and schedule it to air.



## Example Workflow: Simple Dublist Processing

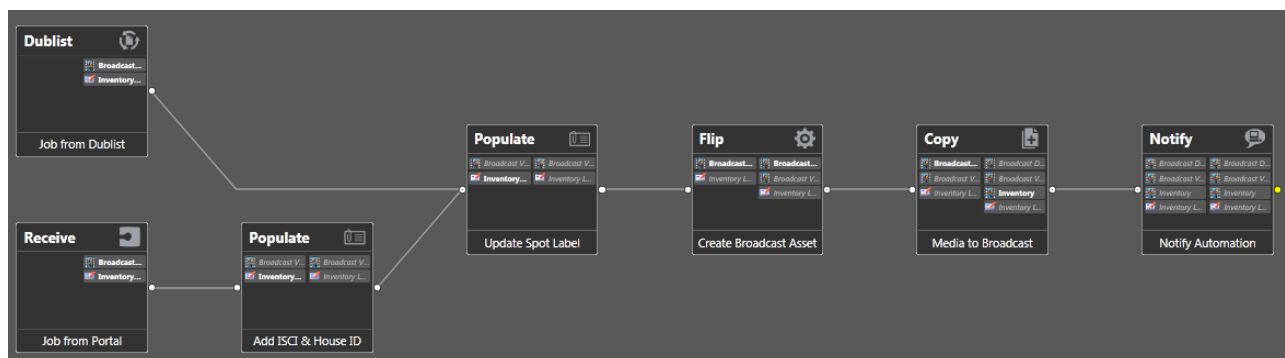
Dublist processing begins with Dublist Schemes that you create in the Management Console for different dublist formats. These schemes are selected in the Dublist action Inspector to parse incoming dublists and extract selected data. Other components you create in the Management Console include variables to hold traffic metadata, and catalogs and binders for receiving jobs spawned by workflows.

**Note:** You can use one of the default dublist schemes provided in Vantage or create a dublist scheme to meet your requirements before you configure and use the Dublist action.

If you are using an XML/HTML-based dublist (such as BXF, Eclipse, or Novar), the dublist must be saved with the appropriate encoding relative to the content which is present in the file. For example, If you are creating an XML file with non-ASCII characters (such as German or French), you must save the XML file with UTF-16 encoding. In XML files, the encoding type is generally indicated in the header line: `<?xml version="1.0" encoding="utf-16"?>`.

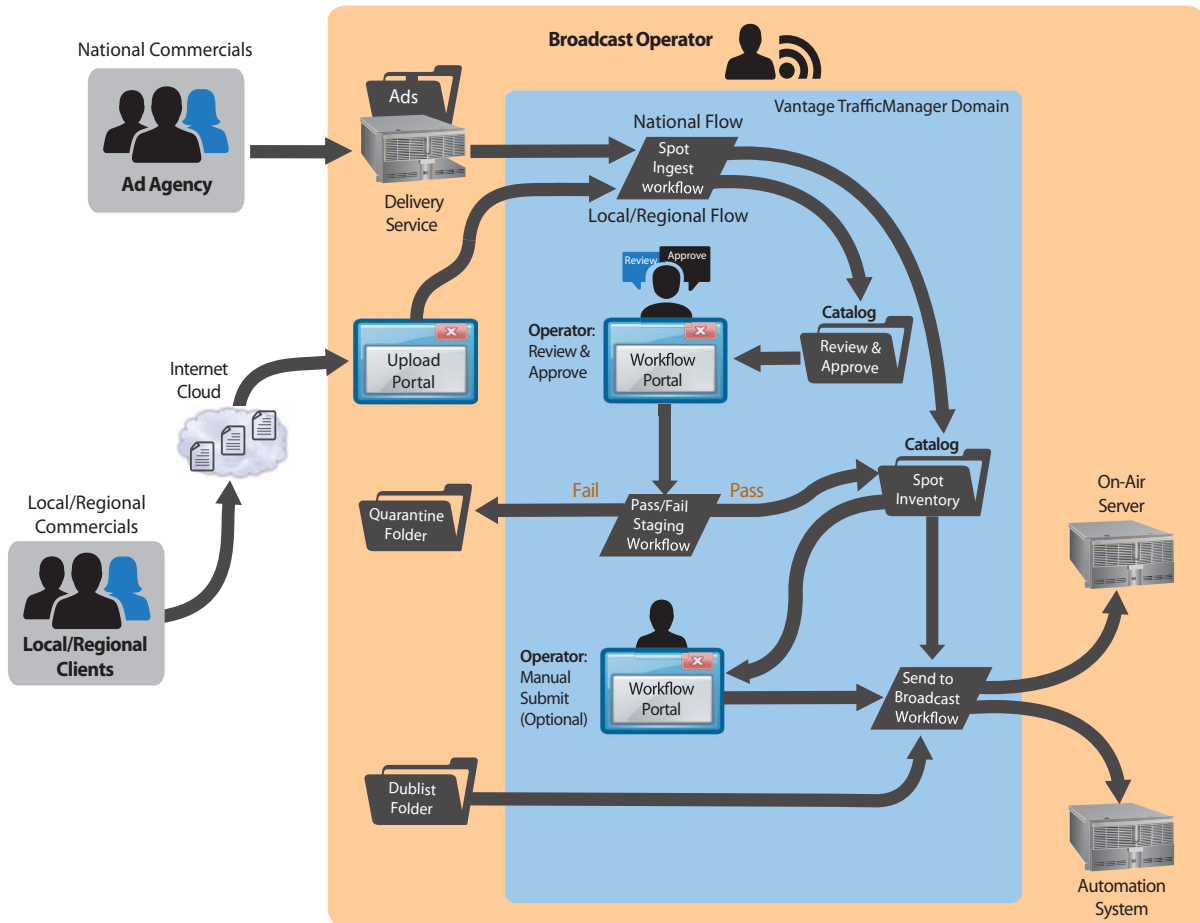
After the components are made, you create a workflow in the Workflow Designer to receive and process the dublists (see the Dublist Processing figure below). Here are the details:

- The workflow starts with a Dublist action, which detects incoming dublists in the location you specify and parses them to extract pertinent data, such as Ad-ID/ISCI, House ID, media titles, durations and so on. The Dublist action correlates the dublist entries with previously ingested media.
- A Receive action allows an operator to forward a job containing previously ingested, previewed, and approved media to this workflow. The operator must supply an Ad-ID/ISCI code to pass to the automation system.
- The Populate action updates the metadata label to indicate to Workflow Portal operators that the spot has been sent to broadcast.
- A Flip action transcodes the media to broadcast format.
- A Copy or Deploy action forwards the media to the broadcast server.
- A Notify action forwards selected dublist information to the automation system to notify it that the media is present and ready to air.



## Example TrafficManager System Workflows

The following complex workflows present examples of complete TrafficManager systems you can assemble. Your workflows will vary depending on your processes. The illustration below illustrates typical national and local/regional workflows.



The processing flow in a typical national broadcast TrafficManager system begins when an ad agency submits a commercial on behalf of an advertiser to the broadcaster. The media is processed by the workflow to ensure it meets QC standards and gets logged into inventory and assigned to a catalog. A dublist gets parsed and its entries matched up with received media. From inventory, the media is sent to the broadcast server, and dublist information notifies an automation server that the media is ready to air.

**Note:** You can use one of the default dublist schemes provided in Vantage or create a dublist scheme to meet your requirements before you configure and use the Dublist action.

If you are using an XML/HTML-based dublist (such as BXF, Eclipse, or Novar), the

dublist must be saved with the appropriate encoding relative to the content which is present in the file. For example, If you are creating an XML file with non-ASCII characters (such as German or French), you must save the XML file with UTF-16 encoding. In XML files, the encoding type is generally indicated in the header line: `<?xml version="1.0" encoding="utf-16"?>`.

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A local or regional flow might be similar, but typically the Ad Agency is replaced by a direct advertiser (local/regional clients), and dublist processing may be omitted. As shown, a human operator usually previews and forwards approved commercials for on-air processing; this step is typically not included in a national system.

## Typical Workflow Organization

TrafficManager commercial workflows generally come in two types:

- Ingest Workflows—ingest media, QC check it, review it (optional), and register it.
- Publishing Workflows—process dublist (optional), flip and deploy the previously ingested media to the broadcast or ad insertion server, and notify the optional automation system.

Essentially, these two workflow types compose the two halves of a complete processing system. That is, the Ingest Workflow usually feeds the Publishing Workflow—input feeds output. The workflows that follow provide two or three examples of each workflow type.

These examples are included in this section:

- [Example Workflow: Local/Regional Ingest to Review](#)
- [Example Workflow: Local/Regional Ingest Reviewed](#)
- [Example Workflow: Ingest National Spots](#)
- [Example Workflow: Ingest In-House Promo](#)
- [Example Workflow: Publishing Deliver to Broadcast](#)

## Example Workflow: Local/Regional Ingest to Review

This workflow is a typical example of a local or regional ingest workflow that prepares media for a review and approval cycle. The workflow...

- Receives a media file uploaded via the TrafficManager Web Upload Portal.
- Populates variables with metadata from the Label.
- Localizes the file.
- Gets media information such as filename, framerate, aspect ratio, audio channels, etc.
- Performs QC: file validation, audio format and loudness, and sets trim points.
- Determines video format and transcodes into an appropriate proxy.
- Registers the media into a Review & Approval catalog to await operator review.

After this workflow executes and the operator reviews the commercial, the operator would typically resubmit the job to a publishing workflow such as the [Example Workflow: Publishing Deliver to Broadcast](#) to deliver the commercial for playout.



## Example Workflow: Local/Regional Ingest Reviewed

This workflow is a typical example of a local or regional ingest workflow in which the media has already been reviewed and is now ready for processing into inventory (or requires notifying an administrator that it failed inspection). The workflow...

- Receives a media file from a Review Catalog.
- Determines whether the media passed review or failed. If failed, an administrator is notified to follow up. If passed, the spot label is updated and the media prepared for inventory.
- Determines the video format and aspect ratio and measures CALM Act loudness.
- Creates a mezzanine intermediate file for previewing before transcoding for broadcast.
- Registers the media into inventory.

After this workflow executes, the operator would typically preview the spot and then resubmit the job to a broadcast workflow such as the [Example Workflow: Publishing Deliver to Broadcast](#) to deliver the commercial for broadcasting.

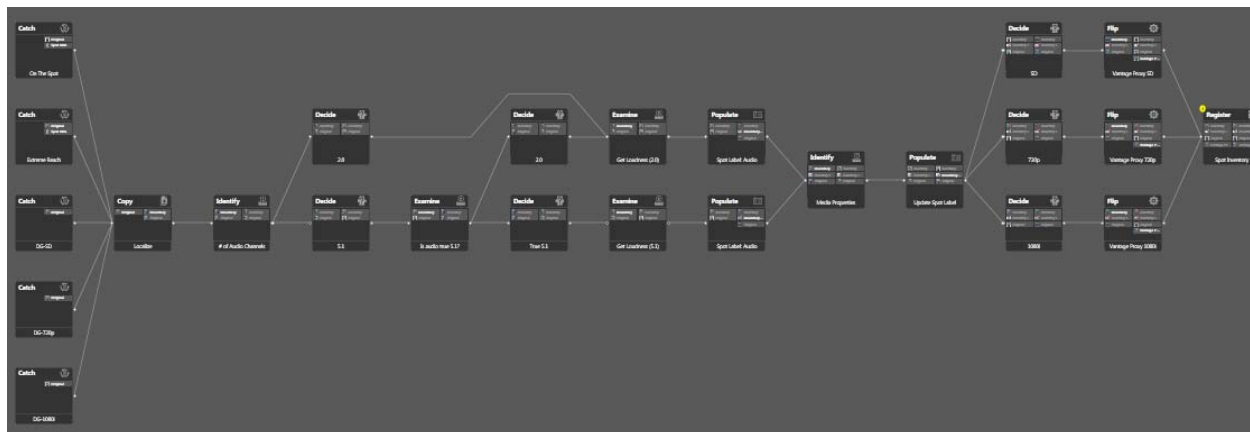


## Example Workflow: Ingest National Spots

This workflow is a typical example of a national ingest workflow in which the media is ingested from a catch server, automatically QC checked, adjusted for CALM act loudness, and sent to inventory. The workflow...

- Ingests media from a catch server.
- Localizes the media.
- Determines the audio format and measures CALM Act loudness.
- Updates the spot label.
- Identifies media video format and properties.
- Creates a proxy for preview.
- Registers the commercial into inventory, and automatically sets the binder name in the catalog to the Ad-ID/ISCI code so that the Dublist action can find the media by Ad-ID/ISCI.

After this workflow executes, the operator would typically use the Workflow Portal to forward the asset to a publishing workflow such as the [Example Workflow: Publishing Deliver to Broadcast](#) to deliver the commercial for broadcasting. Alternatively, a Dublist action might submit jobs to the publishing workflow automatically based upon schedules in the traffic system.



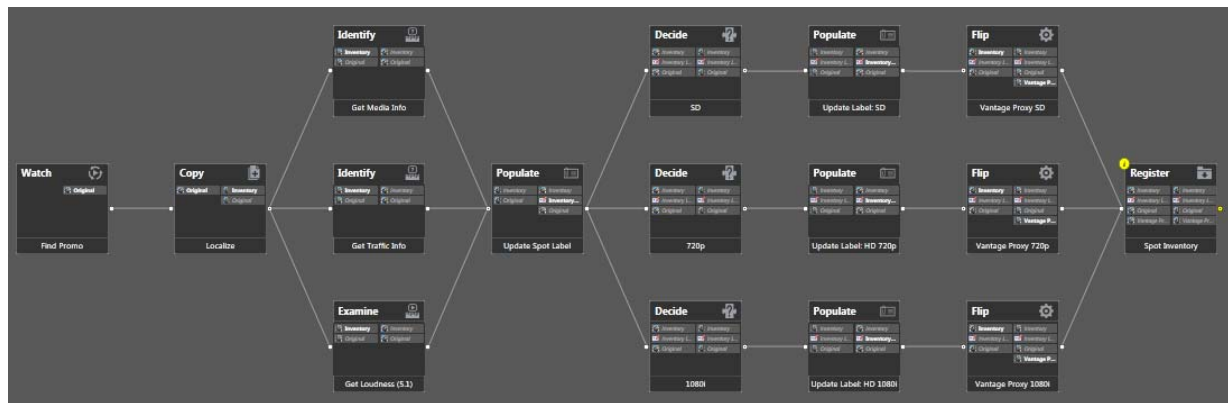


## Example Workflow: Ingest In-House Promo

This workflow presents a typical example of an in-house promo, automatically ingested from an in-house server and registered into inventory. This workflow...

- Watches a folder on an in-house server and ingests incoming media.
- Localizes the media, placing it in the Local Store.
- Gets traffic metadata from the file name and creates required variables
- Measures CALM Act loudness.
- Updates the spot label.
- Determines the video format and creates a proxy.
- Registers the media into inventory.

After this workflow executes, the operator would typically resubmit the job to a broadcast workflow such as the [Example Workflow: Publishing Deliver to Broadcast](#) to deliver the commercial for broadcasting.



## Example Workflow: Publishing Deliver to Broadcast

This workflow presents a typical example of the publishing half of commercial processing. Media entering this workflow has been ingested and registered into inventory by an ingest workflow, and this workflow prepares the media for broadcasting and places it on the on-air server. This workflow...

- Watches a folder for dublists, parses the dublists, and matches dublist entries with received media.
- Receives a submitted job containing ingested and (optionally) approved media.
- Trims, corrects audio, and transcodes the media for air and copies it to the broadcast server.
- Notifies the automation system that the media is ready to air.

