VANTAGE 3.0

Management Console & System Administrator Guide

Telestream

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Preface

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CHAPTER 1

Vantage Overview

This chapter introduces you to Vantage, the Vantage Management Console and system administration activities. It also identifies the various products in the Vantage family and describes the features offered in each.

In order to use the advanced features of Vantage Enterprise system management products, a license is required. These products and corresponding license may be purchased from Telestream at sales@telestream.net.

Topics

What is Vantage?

Vantage is a powerful workflow design and automation product that allows you to build highly automated, adaptive media processing workflows. Vantage combines a wide range of workflow design and media processing capabilities into a single program, and allows tight coupling between components so that workflows can make decisions and execute custom rules (as necessary) to solve a broad set of operational problems.

Vantage can be installed on a single server or installed as an array of servers, each hosting multiple Vantage transcoding services for example, all working together to provide scalability and durability. In either case, a Vantage database is used as the central point for workflow design and execution. Services execute the workflows, coordinating with each other through the Vantage database; this central database also stores job history and other information about workflows.

Vantage Components

Vantage provides a range of client programs, Web applications, and scalable services, that work together to provide a complete workflow design and automation solution.

These components all connect to a database which is at the center of the entire Vantage system.

Client programs include: Management Console, Workflow Designer, Workflow Portal, the Job Status Web app, and the Vantage Web Dashboard.

Management Console

The Vantage Management Console (usually referred to as just the *console*) is the program you use to configure and administer your Vantage installation - including Vantage services, licenses, workflow design items, and the workflows themselves - which comprises the domain.

Workflow Designer

Vantage Workflow Designer is the program that enables you to design and automate workflows to meet your organization's transcoding and workflow automation requirements.

Workflow Designer allows you to activate and deactivate workflows, and allows you to submit and monitor the jobs that are created as workflows perform transactions on media you've submitted for processing.

Workflow Portal

The Workflow Portal enables media workflow administrators to quickly design and deploy user interfaces for operator metadata entry, content browsing, stitching, and job submission. Administrators design the tasks for the operator and the back-end process that takes the operator input. Operators can then use Vantage Workflow Portal to access their tasks and submit jobs.

Web Dashboard

Enterprise Control | Master Control

The Vantage Dashboard is a Web Application which provides operators with an easy-to-use interface that delivers valuable information to help in evaluating, diagnosing, monitoring, and troubleshooting the Vantage system.

The Vantage Dashboard provides the following features:

- Determine status of jobs in Vantage workflows
- Determine the health of Vantage system components
- Diagnose and trouble shoot operational problems

Job Status Views

Enterprise Control | Master Control

The Job Status Views is a Web application that provides Vantage users with a read-only view of jobs submitted. Job Status Views also provides administrators with the capability to deploy customized Web status views to others who need to see jobs in workflows. Job Status Views are available with Vantage Team Management and with the Vantage Enterprise system management products.

Job Status Views provides the following features:

- Displays workflow job status
- Enables administrators to customize the Web app with different views for different users (with Custom View license)

- Enables administrators to control which users can use certain views
- Administrators can create custom views for individual actions in workflows.

Vantage Workflow Products

Vantage is a powerful, enterprise-class video workflow design, management, and automation software. Vantage is a modular, unified workflow framework that combines transcoding, analysis, metadata processing, delivery, and notification.

Features

Vantage workflow products provide these features:

- Client programs - Management Console, Workflow Designer, Workflow Portal, the Job Status Web app, and the Vantage Web Dashboard.
- Automates content ingest, transcoding, video file interoperability, multi-channel distribution, and other video production workflows
- Performs intelligent decision making and self-healing quality control workflows
- Unifies best of breed, multi-vendor environments into a managed, faster than real-time ecosystem
- Scales to thousands of workflows in an enterprise server environment

Workflow Products

Vantage allows users to design and automate workflows in a variety of products. These products may also be clustered using Array, or integrated using either of the Vantage Enterprise system management products.

Vantage Workflow products offer transcoding, metadata transformation, analysis, and intelligent decision making. They supports any file format and integrate directly with major video systems to provide seamless device interoperability.

- **Vantage Transcode** - Automates video & audio transcoding for web, mobile, and VOD formats.
- **Vantage Transcode Connect** - Automates transcoding, metadata transformation, and delivery for web, mobile, and VOD multi-channel formats.
- **Vantage Transcode Pro** - Automates the full spectrum of video and audio transcoding including broadcast, IPTV, MXF, as well as web, mobile and VOD formats.
- **Vantage Transcode Pro Connect -** Automates multi-channel delivery, content ingest, and device interoperability workflows for all major edit, broadcast, cable, and new media systems.
- **Vantage Analysis -** Performs media analysis, decision making, and quality control of workflows.
- **Vantage Workflow Portal** - Creates operator user interfaces for browsing video, entering metadata, and moving media through workflows.

- **Vantage Array** - Binds Vantage Workflow products together, offering easy and cost-effective capacity expansion, failover, redundancy, and load-balancing.
- **Vantage Team Management** - Provides user accounts and the ability to create custom web-deployed job status views, allowing management of multiple internal clients and groups across the enterprise.

Team Management

Team Management

In a distributed Vantage domain, Team Management provides user accounts to control which users can access workflow categories in Workflow Designer and Workflow Portal, as well as Web-based Job Status and limit access to the Vantage Management Console.

Vantage Enterprise

Vantage Enterprise system management products are designed for large-scale or mission-critical workflows. Vantage Enterprise offers system management products that provide a higher level of visibility and a deeper level of control over the entire workflow.

The main features of Vantage Enterprise system management products are:

- Offers scalable and resilient transcoding including the broadest range of format support in the world.
- Provides dashboards, system and process optimization tools, team management, and the highest level of workflow resiliency in case of system or environmental failures.
- Unifies multi-vendor solutions into managed, real-time decision-based, video workflows.
- Offers truly scalable automation for ingest, video file interoperability, multi-channel distribution, and other content production workflows.
- Designed for leading broadcasters, content owners, cable television, telecom, and new media companies.

There are two Vantage Enterprise products: *Enterprise Control* and *Master Control*.

Throughout this document, look for these icons to identify features that are specific to each product.

Master Control | Enterprise Control

Enterprise Control includes a workflow management layer and suite of tools that maximizes workflow capacity, resiliency, throughput and reliability for large-scale or mission-critical applications. Enterprise Control features are included in Master Control as well.

Master Control

Master Control is a higher-tier workflow management layer that adds visibility and management of complex video workflows and allows a unified ecosystem for multi-vendor products with centralized process control and monitoring.

Enterprise Control

Vantage Enterprise Control maximizes workflow capacity, resiliency, throughput, and reliability for mission-critical applications. Vantage Enterprise Control is a licensed edition and all its features are identified in this user guide by the following icon:

The features of Enterprise Control are:

- A system management layer and suite of tools for combining Vantage Workflow products in a predictable, resilient workflow environment.
- Customizable load balancing which enables more efficient hardware utilization. This dynamically utilizes the best available resources, adapts to fluctuations in processing or media loads, and enables a smaller server footprint. This ability to do more with fewer nodes results in the following:
    - — Savings in hardware costs.
    - — Reduced rack space, power, and cooling requirements.
    - — Fewer computers used resulting in reduced chance of failure.
    - — Ability to recover with greater efficiently.
- Fully redundant failover of all systems and services. Any node can perform any service at any time.
- User-configurable automated task retry and failover enabling greater reliability, workflow predictability, and reduced overhead for recovery from environmental failures (FTP, SAN, external systems).
- Team management capability provides user accounts and the ability to create custom web-deployed job status views, allowing management of multiple internal clients and groups across the enterprise.
- Workflow analytics that display a visualization of real-time and historical workflows. This provides bottleneck analysis, workflow optimization, and the tracking of batch jobs through the overall process.
- Array capability for binding Vantage Workflow Products together.

Master Control

Vantage Master Control provides visibility and management of complex video workflows.Vantage Master Control is a licensed edition and all its features are identified in this user guide by the following icon:

Master Control

The features of Master Control are:

- All capability of Vantage Enterprise Control plus: dashboarding (browser-based graphical visibility of system status), health and performance monitoring, and easy local or remote visual monitoring of system health.
- Historical reporting, including external notification of key system statistics, and a user-configurable job history reporting system that allows report generation for billing, system utilization, and capacity planning.
- Third-party control and monitoring which includes support for Agility.

CHAPTER 2

Using the Management Console

This chapter describes how to use the Vantage Management Console.

The Vantage Management Console is a Windows MMC snap-in that enables Vantage system administrators to configure their Vantage domain, and to scale Vantage services across multiple servers (creating a distributed Vantage domain) to meet their operating requirements.

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

Topics

The Management Console is designed to facilitate centralized management of the software components and resources that comprise a Vantage domain, including settings and options, catalogs, Vantage stores, Vantage services, licenses, workflow design items, and client application configurations. The Management Console also provides real-time status details for services, machines, and the domain at large, plus a domain backup/restore utility and other support utilities.

The Management Console manages a single Vantage domain at a time. By default, the console connects to and manages the Vantage domain on the same server (*localhost*) upon which it is installed.

Caution

Although the Management Console is a multi-user application, when used for modifying a domain, it is intended for use by one user on one domain at a time. Connecting multiple consoles to the same Vantage domain for any other purpose than viewing status and configuration details is not recommended and can lead to domain configuration problems.

Each Vantage domain includes a single database - specifically, a Vantage Microsoft SQL Server database instance.

Many organizations implement Vantage as a single domain. However, in large facilities, you may have several separate and independent Vantage domains for scaling to high-volume workflow processing or for specialization and departmentalization purposes.

In a facility with multiple Vantage domains, you can connect to any Vantage domain in the network from any Management Console in the network, for more centralized management and control.

Related Topics

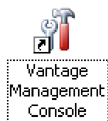
Starting the Vantage Management Console

Starting the Management Console

To start the Vantage Management Console, use one of these methods:

- Select start > Control Panel > Administrative Tools > Vantage Management Console
- Select start > Programs > Telestream > Vantage > Vantage Management Console
- Double-click the Vantage Management Console shortcut icon on your desktop:

Figure 1. Management Console Shortcut.



Logging In

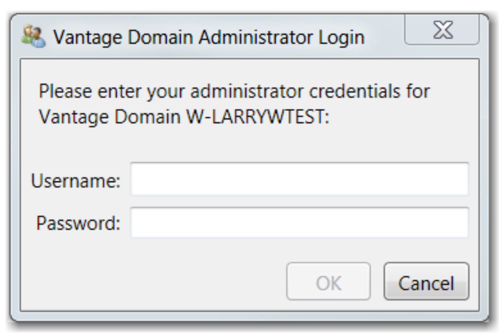
Team Management

If you are accessing a Vantage domain where Team Management is enabled, you need to provide your Vantage user with Administrator privileges to log in. (The default Vantage user is *Administrator*, with no password assigned - this user has Administrator privileges, enabling you to log into the Console with this user).

Note: *Vantage users - username and password - are maintained in the Vantage Management Console.*

When the Management Console starts up it displays a login dialog. Enter your Vantage user credentials. Only Vantage users who are administrators can log into the Management Console.

Figure 2. Logging in to the Management Console.



Enter your Vantage username, and password, if required, and click OK to connect.

Note: *All user passwords are encrypted in the Vantage database.*

Related Topics

Logging in to a Different Vantage Domain

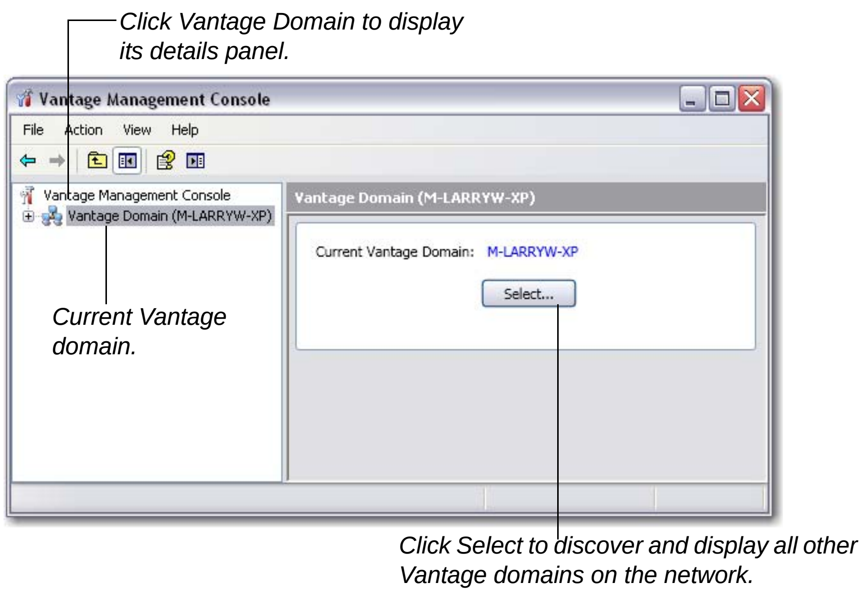
Each Vantage domain is by default, identified by the name of the computer on which the Vantage database instance is running. To determine the domain to which the console is currently connected, note the computer name of the Vantage Domain component in the component panel or click to display its details panel.

The Management Console connects to one domain at a time. Until you connect to a domain, you can not use the console.

In an environment where more than one Vantage domain has been implemented, you can connect to any domain you require with the same Management Console to perform your tasks.

To connect to another Vantage domain, click the top icon - the Vantage Domain icon - in the component panel, to display the Vantage Domain details panel.

Figure 3. Vantage domain component.

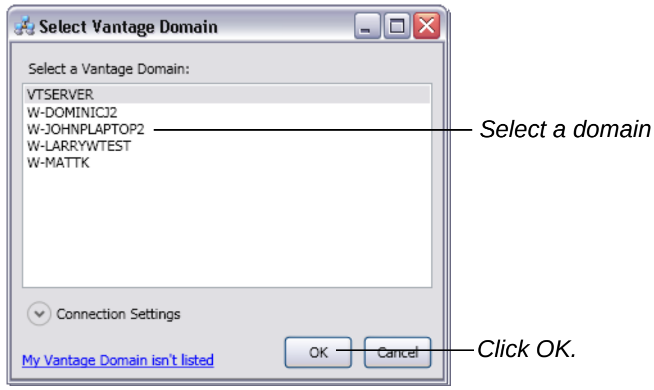


Current Vantage Domain. The machine name of the Vantage domain you're currently managing.

Select. Click Select to search the network for all Vantage database instances (domains) and display them in a list.

The Management Console polls the network for domains in the same subnet, then displays the domains that responded in a list:

Figure 4. Vantage Domain Selection panel.



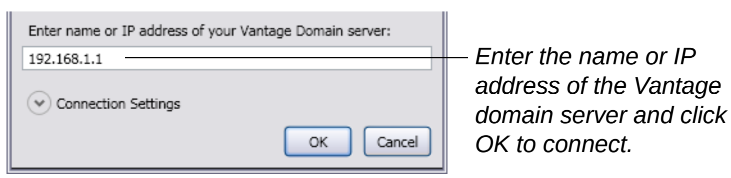
Select the domain you want to connect to, and click OK.

When you change domains, the Management Console closes its connection to the current domain's Vantage database and connects to the new domain's database, refreshing the details of all of its components.

Manually Connecting to a Domain

If the domain you're connecting to is not in the list (not in your current subnet), click My Vantage Domain isn't Listed to display the Vantage domain name field:

Figure 5. Manually entering the Vantage domain server.

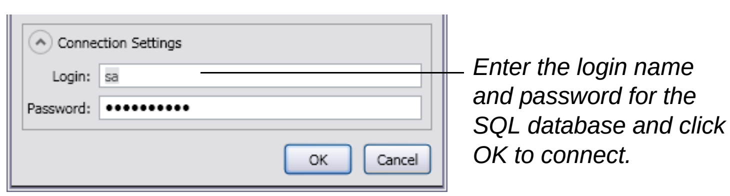


Enter the computer name or IP address (for example, *VantageServer203* or *192.168.1.1*) and click OK to connect.

Connection Settings

If the Vantage domain is installed on a SQL database where the default settings for the MS SQL server account were changed during installation, click My Vantage Domain isn't Listed to display the Vantage domain name field:

Figure 6. Change Vantage Domain panel.



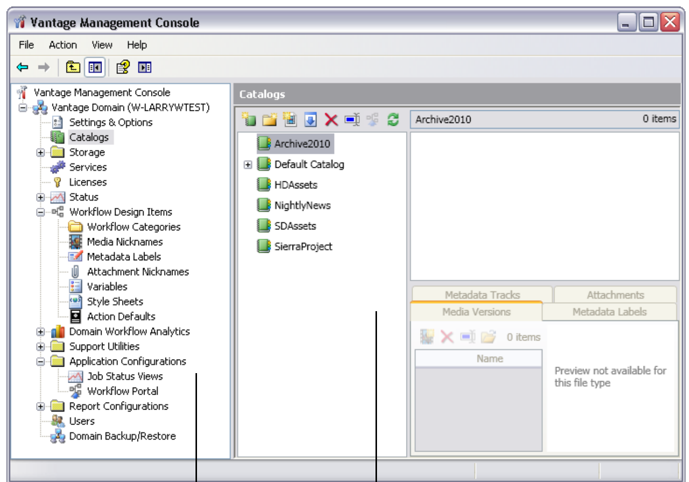
Enter the Vantage database SQL server account username and password (obtained from your Vantage administrator), and click OK to connect.

Related Topics

Using the Vantage Management Console Workspace

The Management Console workspace is composed of panels you utilize to configure and manage all of the components that comprise a Vantage domain to meet your operating requirements.

Figure 7. The Vantage Management Console workspace.



Component panel displays domain components.

Details panel - view & update selected component details.

Component Panel

On the left is the domain component panel, whose Vantage domain components are arranged hierarchically under the current domain.

Details Panel

To the right of the component panel is the details panel. The interface displayed in the details panel is specific to the selected component.

For example, when you select Catalogs, the console displays a comprehensive, three panel interface designed so that you can manage your catalogs. When you select Licenses, the Management Console displays a simple file table, with details about each license, and you can view the contents of a given license.

To learn how to use each component, select it and then click the Online help button in the toolbar to display its topic. For specific details about each control in a component, display the tooltip for the control by hovering your cursor over the control.

Settings and Options

The Settings & Options component is comprised of General Settings, Email Settings and Authorization Settings.

Use the Email Settings tab to configure your SMTP host for outbound email transmission from Vantage.

Use the Authorization Settings tab to maintain the special credentials that Vantage services can use to access network servers to process files. These credentials typically supplement the normal Windows domain credentials supplied for each service.

Note: *You must restart Vantage services to pick up new authorization records.*

General Settings

There are two general settings: Misc Settings and Tips and Warnings.

Misc Settings

Master Control | Enterprise Control

Enable cost-based load balancing. Click to enable cost-based load balancing.

Note: *Enabling cost-based load balancing activates the Target Resource Usage up-down counter. Conversely, disabling cost-based load balancing activates the Session Limit counter. Both of these controls are located at Service Limits on the Services panel.*

Vantage allows you to specify a Target Resource Usage value (in addition to a Session Limit) for each Vantage Service. This target will be used during load balancing.

For example, an administrator might configure an Encode Service to target resource usage of 16, specify a 3GP encode action to have a resource cost of 1, and an MPEG-2 HD encode action to have a resource cost of 8. During load balancing, Vantage will ensure that:

- No more than two MPEG-2 HD jobs will execute simultaneously
- Up to 16 3GP jobs can execute simultaneously
- One MPEG-2 HD and eight 3GP jobs can execute simultaneously in ideal situations
- The MPEG-2 jobs are not starved by the 3GP jobs which only require one slot at a time

Master Control | Enterprise Control

Enable user administration. Check to enable user administration controls. (See User Management).

Vantage Workflow Designer Grid Width/Height. This feature is available in all products. Enter the default width and height values of the Workflow Designer grid.

Tips and Warnings

Restore Tips and Warnings. Click to restore tip and warning messages that were previously disabled by clicking “Don’t show me this again”.

When tips and warnings are restored, these tips and warnings will again display as you interact with Workflow Designer.

Hide Tips and Warnings. Click to disable all tip and warning messages. These messages can also be individually disabled by clicking "Don't show me this again" when they appear.

Email Settings

Vantage workflows may include message actions which have been configured to send email messages.

The email that is specified in the message action may be an individual, a system, or an alias for a group of Vantage users or administrators.

Note: *Until you configure these settings, you won't be able to execute message actions that utilize email in your workflows.*

SMTP Host

Hostname or IP Address. Supply the computer's host name or IP address of the SMTP server.

SMTP Port. Supply the port number of the SMTP server.

SMTP Host Requires Authentication. Check if the SMTP server is configured to require authentication.

Username and Password. Supply the user name and password if SMTP Host Requires Authentication is checked.

This server requires an encrypted connection (SSL). Check this checkbox if SMTP server requires an encrypted connection.

Administrator Email Address

Administrator Email Address. Supply the email address of the Vantage administrator. The email specified for this account can be an alias for a larger group, maintained by your IT department.

Send Test Email. Click to test your settings by sending an email to the administrator email address.

Service Status Notification

If a Vantage Service starts or stops running, or if a service fails, an email is sent to the administrator email address.

Note: *An email will not be sent when a Vantage Service enters or exits Maintenance Mode.*

Email administrator upon service starting. Check this checkbox to email the administrator when a service starts. For example, if a Vantage Machine hosting an Analysis and a Monitor service is started without any problems, two emails are sent to the administrator reporting the start each service.

Email administrator upon service stopping. Check this checkbox to email the administrator when a service stops.

Email administrator upon service failure. Check this checkbox to email the administrator when this service fails (crashes or otherwise stops unexpectedly). For example, if a Vantage Analysis service is stopped from the Task Manager (forced termination), an email is sent to the administrator. Or, if a Vantage Analysis service crashes during start-up, an email is also sent to the administrator.

Authorization Settings

Authorization settings are considered supplemental to the Windows account and share settings, which should be your primary means of providing access and authentication to required storage for Vantage services. When accessing machines in workgroups, users should make sure that Vantage services are running as an account that has access to the locations that will be referenced. If this is done, then authorization records are unnecessary unless some machines must have unique accounts.

Use the Authorization Settings tab to create and manage credentials for Windows shares (on Windows computers) or UNC paths, where media may be ingested, stored, or delivered by a Vantage service using an account that is different from its logon account, when this Windows account and share settings do not provide access.

When each service starts, it reads all authorization records and stores them for use at runtime, as necessary. For example, the transport service may be called to execute a copy action, which needs to write a file to a share or a non-domain server and directory, where the service is not authorized by its own account. The transport service will process the authorization records based on the path supplied, to determine if it can gain authority via one of its authorization records.

Note: *Authorization settings should only be used when the normal Windows account and share settings do not provide access to necessary shares: for example, shares on other Windows domains, or on workgroups.*

The purpose of entering authorization records is to enable Vantage to maintain this information for network locations - *independent of the authentication inherent with the logon account of a specific service* - the Vantage monitor service, for example. If you know that a specific service doesn't have the authorization to utilize a given network location, you can create an authorization record to provide credentials.

When you provide authorization records for a network location, any service in the domain can utilize it.

It is important to understand that when you access network locations via Vantage Workflow Designer, the locations you navigate to are accessed with Workflow Designer's logon account permissions - which may be different than the logon account for Vantage services.

However, these locations will ultimately be accessed by Vantage services during execution of your workflow - services which may have different users and permissions. Therefore, you need to take the extra step of ensuring that the service, which will be accessing this share at workflow runtime, has authenticated access to the location.

Additionally, authentication does not control sharing and security permissions (for example, access, and read/modify/delete/write permissions). Make sure that when you set up network locations, you have set each location with the proper permissions for the user accounts who will access it.

After you add, modify, or delete a record, click the Save icon to update the records in the Vantage database as encrypted data.

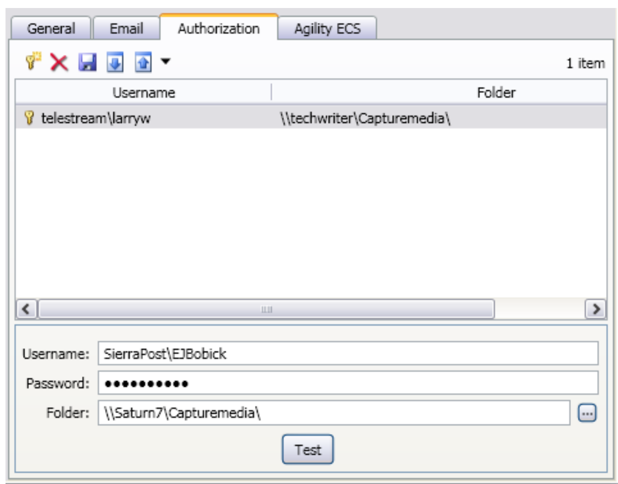
Managing Authorization Records

Click the Settings & Options > Authorization tab to create, edit, and delete authorization records.

Restart Vantage services to pick up new authorization records. To restart a Vantage services in the Management Console, follow these steps:

1. Click on Services in the details panel.
2. Right-click the target service and select Enter Maintenance Mode.
3. Right-click the service again and select Exit Maintenance Mode.

Figure 8. The Vantage Management Console workspace.



You can also export and import these settings.

Adding an Authorization Record

Click the Add Authorization Record icon in the toolbar, and supply the details. Click Test to validate the record, and click the Save button to add this validated authorization record to the database for use by all Vantage services in the domain.

Username. Enter the authorized username required to access the Windows share identified by the UNC path.

If the user account is part of a Windows domain, the username must include the domain or computer name, in the format *domain\username* or *ComputerName\Username*. For example, `SierraVideo\Vantage` or `NewsServer\Bill`.

If the username is part of a workgroup (a non-domain account), you must provide the authority in addition to the user name. For example, if you want to use the account: *VantageUser* that exists on machine *FooServer1*, you should specify *FooServer1\VantageUser*.

Password. Enter the authorized password for the Windows share.

Folder. Click Browse and navigate to the Windows share you are authenticating. Or, enter it manually. The path must be in valid UNC form: *ComputerName**Sharename*\.

Test. Click Test to verify that your credentials are entered correctly for access to the specified Windows share.

Modifying an Authorization Credentials Record

Click on the record you want to modify. Make changes to the username, password, and folder and click the Save icon in the toolbar.

Deleting an Authorization Credentials Record

Click on the record you want to delete, click the Delete icon in the toolbar, and click OK to confirm.

Importing & Exporting Authorization Records

Importing Authorization Records. Click the Import icon in the toolbar to display a file system dialog, so you can select a file. Navigate to the directory where the authorization record XML file is stored. Select the file or files you want to import and click OK.

Exporting Authorization Records. Click Export to display a file system dialog, so you can select the server and directory where you want to save each of the selected records as an XML file. The file by default is named the same as the first records name, but can be changed before saving it.

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

Configuring the Agility ECS

Master Control

Before you can use your Agility ECS system in Vantage, you must first identify the system to the Vantage domain, so that Vantage client applications can communicate with it via the Agility Bridge.

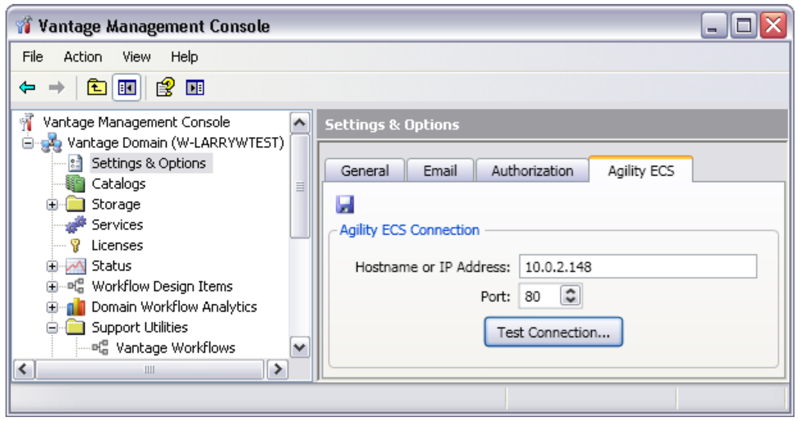
Agility ECS Settings

To identify the Agility ECS and test its connection, launch the Management Console, connect to the target Vantage domain.

Open the Vantage node tree, and click on Settings & Options.

Then, Click on the Agility ECS tab:

Figure 9. Identifying Agility ECS to Vantage.



Host Name or IP Address. Supply the Agility server's host name or IP address.

Port. The default port is 80, for HTTP.

Note: *If your IIS server is using a port other than 80, enter that port number here.*

Testing the Connection

To test the connection to the specified Agility ECS system, click Test Connection.

If there is a network problem, or you have supplied an invalid hostname or IP address, or the Agility system is not in a state where it can respond to queries, Management Console displays the following error:

Figure 10. The Agility connection test has failed.

The connection to the Agility ECS must be successful before you can use the action inspectors to configure Agility Job Profile and Agility Job XML actions in workflows in Workflow Designer and submit jobs.

CATALOGS

Vantage catalogs enable you to permanently identify, maintain, track and access user-created media files, along with its associated metadata and other file-based information associated with the media.

In workflows that create media (using an encode action), you can register the new version in a catalog (using a register action), as part of a job. You can also register media manually (directly in the Management Console), but this is the exception, not the rule.

You can also use the catalog to retrieve specific versions of content and process them in Vantage workflows.

Use of the catalog is optional – your organization may not benefit from the features of the catalog. In terms of features often associated with content management, file systems are at the low end and asset management systems are at the high end. The Vantage catalog falls in between both, and can interoperate with both.

The catalog acts as a means for enabling a binder to extend its lifetime in the Vantage domain beyond the expiration date associated with the job in the workflow that created it.

To effectively operate on high volumes of media with fixed storage space requirements over long periods of time, media by default is deleted from the file system registered to Vantage stores. File deletion occurs automatically and on a regular basis, based on your specifications.

Files are only deleted when they are no longer used in a binder – that is, when the binder is not referenced in a catalog, and when all jobs referencing the binder have expired.

The operating assumption is that media which has been produced by Vantage workflows will be copied or moved to other systems for utilization, and remaining files are of no value after a certain period of time, as set by you.

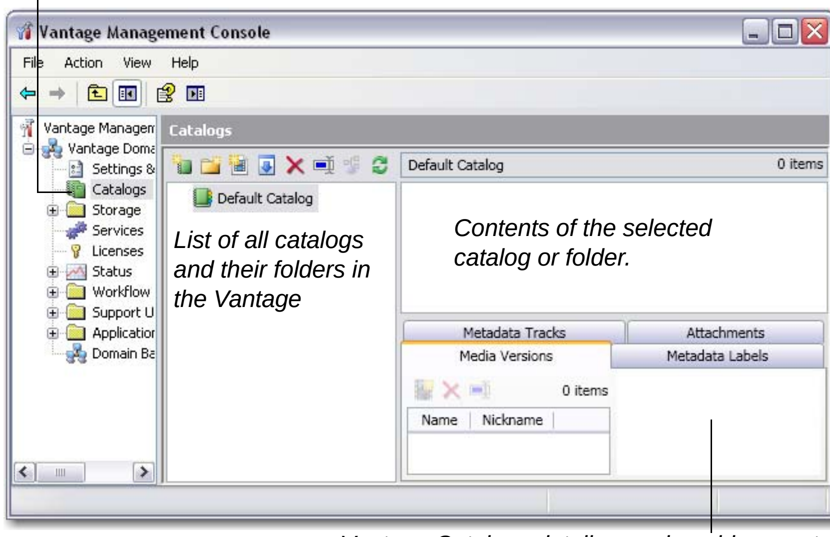
File expiration is best managed by considering a) expiration times for jobs, and b) expiration times for catalog folders. As a rule of thumb, jobs are meant to expire relatively quickly – if binders and supporting temporary files must persist longer than the job, the binders should be registered in the catalog.

Managing Catalogs

To utilize Vantage catalogs in your workflows, you need to create at least one catalog.

Figure 11. Vantage catalogs component.

Click Catalogs icon in the component panel to display its details panel.



Vantage Catalogs details panel enables you to manage catalogs and view binders.

You can create as many catalogs as you need to organize your media in an effective manner for your organization and your workflows.

Catalogs

Creating multiple catalogs enables you to organize and categorize use of media by some division that you deem appropriate. Typically, you'll create catalogs to mirror your organizational divisions, departments, or workflow categories. For example, small companies may have a single catalog. Larger firms may create catalogs by geography, by content repositories, or by department, division, project, or client or show, for example.

Workflows are not limited to accessing or registering media in a single catalog. For example, a given workflow might ingest media from a folder in Catalog A, produce another version of the content and register it in a folder in Catalog B.

Folders

Catalogs are further organized by folders, which enable you further organize and group associated content together. For example, you may have a National Parks catalog, with a Yellowstone and a Yosemite folder. At least one folder must be created in each catalog. You can make as many folders as you need to organize your content, and you can create folders in a hierarchy.

Binders

Binders are a collection of media files, attachment (non-media) files such as XML or PDF files, and metadata labels and tracks that are stored in the Vantage database. Binders are created every time a Watch action discovers a new file. Every job processes a binder, and binders can be registered in the catalog for long-term persistence beyond the life of a job.

Binders are a virtual concept – they do not have any relationship to the actual location of the underlying files. Rather, binders are used to collect elements that are relevant to executing a workflow.

Within a binder, each media and attachment file has a nickname; these nicknames are how Vantage workflows access the underlying files. Nicknames serve a dual purpose. First, because they are abstracted from the actual location of the underlying files, it allows workflows to be designed without worrying about the underlying file locations. Second, when a step in a workflow may require one or more input files, nicknames allow Vantage to pre-validate the workflow and availability of nicknames prior to execution.

However, binders may in fact be processed by more than one workflow simultaneously (either by using the Forward action or using the Workflow Portal). When this happens, Vantage cannot pre-detect which nicknames are necessary in each separate workflow. Administrators that build workflows in this way must take care to ensure that their design does not cause files necessary in one workflow to be deleted by another.

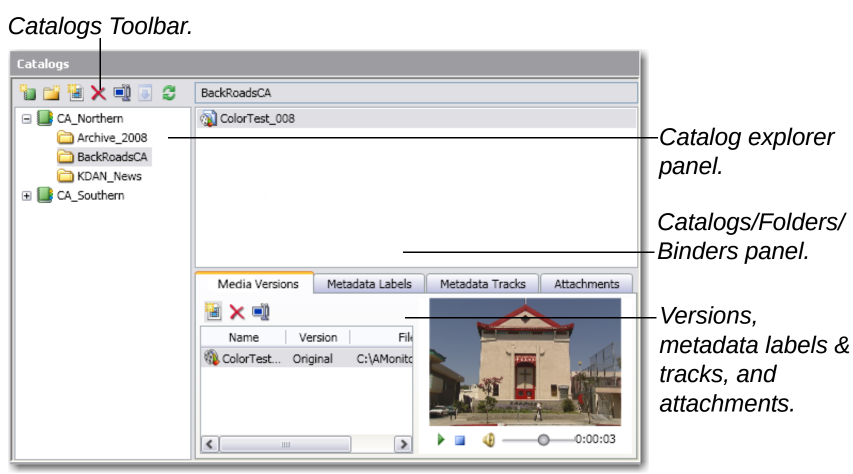
Metadata labels and tracks in a binder are stored in the Vantage database. Only one of each type of metadata label may be part of a binder (so, a binder may contain one Identify label and one Curtains label, but not two Identify labels). It is worth noting that some labels may contain information that is specific to one media file - for example, an Identify label will typically contain file properties for one of the media files in a binder, not necessarily all of them.

Within the catalog, binders may be stored either in the root catalog or in folders. They will be expired according to the expiration rules of the catalog or folder where it is located.

Using the Catalogs Details Panel

To use Catalogs, click the Catalogs component icon under the Vantage domain in the component panel to display the Catalogs details panel:

Figure 12. The Vantage catalog details panel.

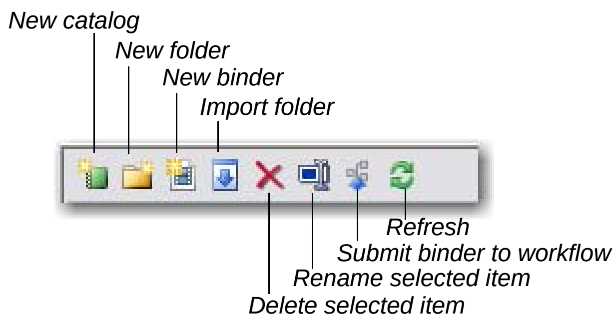


You use the catalog details panel to create and manage your catalogs, including adding and organizing folders, manually adding/deleting binders, and reviewing catalog entries.

Catalog Toolbar

The Catalog toolbar contains icons for frequent tasks:

Figure 13. The catalog toolbar.



You can also use the context menu to perform the same tasks.

Catalog and Folder Context Menu

Right-click on a catalog or folder to display a context menu for frequent tasks:

Remove. Select to permanently delete the selected catalog or folder.

Caution

Removing a catalog/folder permanently destroys all of its folders and binders. No files are deleted, but all references to them are permanently erased from the Vantage database.

Rename. Select to rename the catalog/folder.

Import Folder. Select to import a Windows directory of media, which is organized in the manner you want the catalog organized. Vantage replicates the directory structure, and create a binder for each media file located in the folder hierarchy being imported.

New Folder. Select to create a new folder in the selected catalog.

New Binder. Select to create a new binder in the selected folder or catalog.

Properties. Select to display the Properties dialog for the selected catalog/folder.

Creating and Deleting Catalogs

You can create as many catalogs as you need to meet the needs of your organization.

Creating a New Catalog. To create a new catalog, click the New Catalog icon in the toolbar.

The console displays a new catalog in the catalog tree, with the default text selected. Type in the name of the new catalog and click away from the catalog.

Removing a Catalog. To remove a catalog, select the catalog to permanently remove, and click the Remove icon in the toolbar.

Caution

Removing a catalog/folder permanently destroys all of its folders and binders. No files are deleted, but all references to them are permanently erased from the Vantage database.

Creating and Deleting Folders

Inside each catalog, you can create as many folders as you need to organize the media in this catalog. Folders can be created in a hierarchy, and you can drag them around to re-organize them.

Creating a New Folder. To create a new folder, click the catalog or folder where you want to create a new folder, then click the New Folder icon in the toolbar.

The Management Console displays a new folder in the catalog explorer panel and also in the Folders panel, with the default text selected. Type in the name of the new folder and click away from the folder.

Removing a Folder. To remove a folder, select the folder to permanently remove, and click the Remove icon in the toolbar.

Caution

Removing a folder permanently destroys the folder and all of its folders and binders. No files are deleted, but all references to them are permanently erased from the Vantage database.

Creating and Deleting Binders

In normal operations, binders are created when a workflow discovers new media and triggers a new job. Binders may be referenced by the catalog, or by jobs in the job history. Binders are deleted when all references to them expire – that is, when all catalog references expire, and all jobs expire. When this happens, all temporary files referenced by the binder are also deleted.

Note: *You should only create and delete binders manually - or modify versions, metadata and attachments - for testing purposes, to correct errors in your workflows, or for other exceptional situations. In operation, the creation and deletion of binders is performed by your workflows as content is created or expired.*

Creating a New Binder. To create a new binder, click the New Binder icon in the toolbar.

The console displays a file system dialog so that you can navigate to and select the media you want to assign the binder. Select the target media file and click Open to create the binder for this media file.

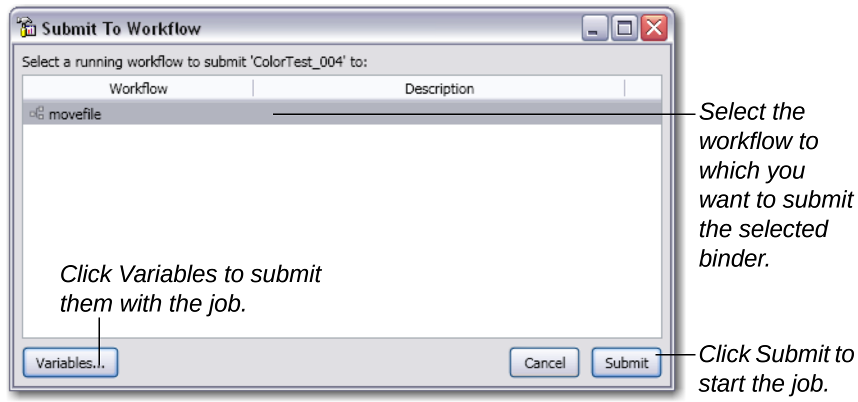
Removing a Binder. To remove a binder, select the binder to permanently remove, and click the Remove Catalog icon in the toolbar.

Submitting Binders

Binders may be submitted to workflows in a fashion similar to when a manual submit is utilized to submit files to a given workflow.

Binder submission in the Management Console is primarily intended as a test/diagnostic feature and is not recommended for day-to-day use in production.

Figure 14. Submit to Workflow dialog.

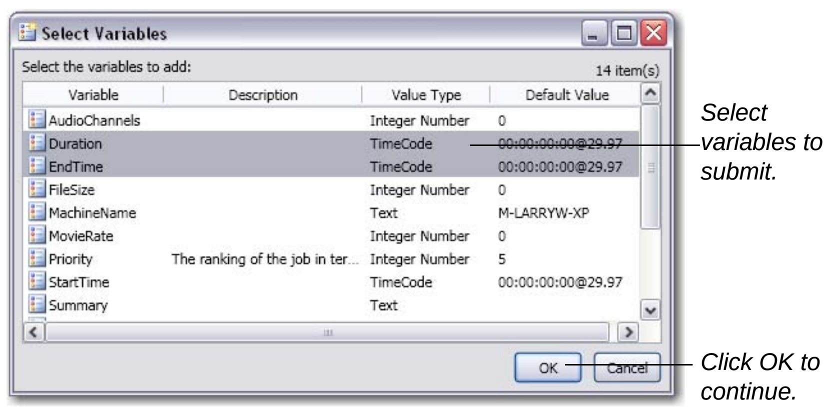


When submitting a binder, it is your responsibility to ensure that the binder contains the requisite items (media versions, labels and/or attachments) that the targeted workflow requires. If the binder specified does not contain all of the required items, the job will fail.

Adding Variables

Click Variables to add variables to the job. The console displays the Select Variable dialog:

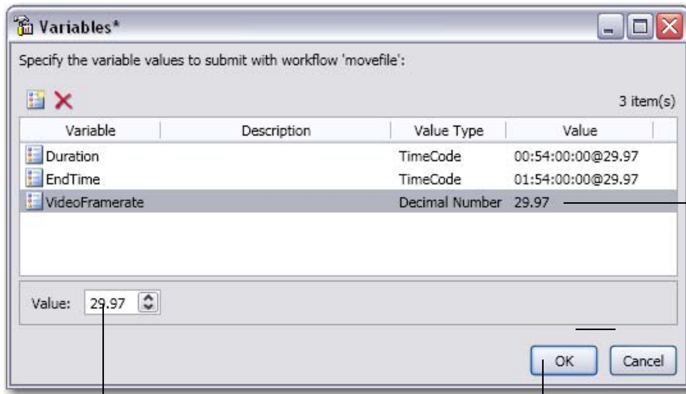
Figure 15. Select the variables to submit with this job.



Select one or more variables (control-click) that you want to submit with this job, then click OK.

The console displays the Variables dialog, with the selected variables listed, so you can update the values:

Figure 16. Update variable values before submitting the job.



Select the variable to update its value.

Update the value in this field.

Click OK to continue.

Select each variable in turn and update the value for this job. When you're done, click OK.

In the Submit To Workflow dialog, click Submit to process this binder using the selected workflow.

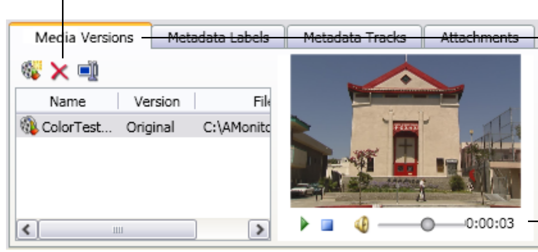
Return to the Workflow Designer, select the workflow and click the Job Status tab to view progress.

Managing Binders

Each binder may contain media files, metadata in label or track form, and attachments. You can view and manage these items by clicking the appropriate tab.

Figure 17. Binder assets - organized by tab.

Catalogs Toolbar.



Catalog, folder, & binder explorer panels.

Mini-player controls.

Media Versions

To view and manage versions of media files, click the target binder in the binder list, then click the Media Nicknames tab.

Binders may contain media files, referenced by nickname. You can add, delete and rename media nicknames.

Add a New Media File. To add a media nickname which references a new file, click the New Media Nickname icon in the toolbar.

The console displays a file system dialog so that you can navigate to and select the media you want to assign to the binder. Select the target media file and click Open to create the binder for this media file.

Removing a Media File. To remove a nickname - the reference to a file - select the file to permanently remove, and click the Remove icon in the toolbar.

Note: *Removing a file reference from a binder does not delete the underlying media file.*

Renaming a Media File. To rename a nickname, select the nickname to rename, and enter the new nickname.

Note: *Renaming a nickname does not rename the underlying media file.*

Previewing a Version. For ASF, WMV, and MP4 media only, you can preview the file - select it in the list and use the mini-player.

Note: *You can also preview ASF, WMV, and MP4 media directly in the Workflow Designer and Workflow Portal client applications.*

Metadata Labels

To view and manage metadata labels, click the target binder in the binder list, then click the Metadata Labels tab.

You can add and delete metadata labels and change their parameter's values.

Add a New Label. To add a new label, click the New icon in the toolbar.

The console displays a list of labels, so that you can select the label you want to assign the binder. Select the label and click OK to add the label template to this media file.

For the details of creating and managing labels, see Metadata Labels.

Removing a Label. To remove a label, select the label to permanently remove, and click the Remove icon in the toolbar.

Renaming a Version. To rename a version, select the version to rename, and enter the new name.

Modifying Label Parameter Values. To modify label parameter values, select the label to display the parameters and values in the parameter detail table on the right. Select the parameter to edit and make your changes. Click Save to update the database with your changes.

Metadata Tracks

To view metadata tracks for this media, click the target binder in the binder list, then click the Metadata Tracks tab.

Attachments

To view and manage attachments - independent files associated with this media version - click the target binder in the binder list, then click the Attachments tab.

Binders can contain multiple attachments. You can add, delete and rename attachments.

Add a New Attachment. To add a new attachment, click the Add attachments icon in the toolbar.

The console displays a file system dialog so that you can navigate to and select the file you want to assign the binder. Select the target attachment file, select an attachment tag, enter a name, and click OK to add the file reference to the binder for this media file.

Removing an Attachment. To remove an attachment, select the attachment to permanently remove, and click the Remove icon in the toolbar.

Note: *Removing an attachment does not delete the underlying file.*

Renaming an Attachment. To rename an attachment, select the attachment to rename, and enter the new name.

Note: *Renaming an attachment does not rename the underlying file.*

STORAGE

Storage in Vantage is an abstract representation of disk space which you can create to make Vantage's media storage easier to use.

Vantage employs the concept of both *managed* and *unmanaged* storage to provide workflows flexibility in file management.

Vantage stores identify locations that Vantage services can use to store files. Vantage stores are managed - files that are saved in a Vantage store are automatically deleted when they are no longer referenced by a binder. A file is referenced by a binder when it is being used by a job or when its binder has been registered in a catalog and its expiration date has not yet passed.

Vantage stores are defined in the console and can then can be utilized in workflow actions that perform file operations. Vantage stores can also be associated with Vantage services as transient storage, utilized as necessary.

Vantage folders also identify locations that Vantage services can use to store files, but the files are never automatically deleted - folders represent unmanaged storage. Unlike Vantage stores, Vantage folders can be created in the console or in the Vantage Workflow Designer. Like stores, they can then can be utilized in workflow actions that perform file operations.

Vantage allows you to manage folders in an address book, allowing you to track common folders for delivering and moving files in workflows.

Transport actions that are responsible for saving files can use both stores and folders as file access and delivery points.

See Also

Managing Vantage Stores

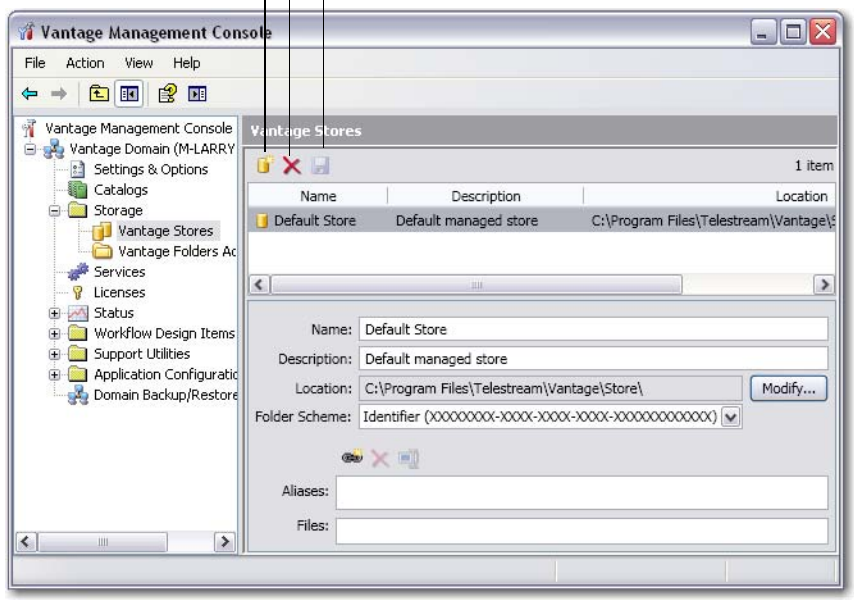
Vantage stores management is performed in the console. When you install Vantage in All in One mode, a default store is created so that you can use Workflow Designer and access at least one store.

You can add other stores as necessary.

To manage your stores, open the Storage icon in the component panel and click Vantage Stores to display its details panel:

Figure 18. The Vantage stores details panel.

Toolbar icons:
New Vantage Store | *Remove Vantage Store* | *Save Changes*



Use the Vantage Stores details panel to add and configure stores. You also use the details panel to modify and delete stores.

Adding and Configuring Vantage Stores

Click the New Vantage Store icon in the toolbar to display the Add New Store dialog.

Name. Enter the name of the Vantage store. This name is displayed in action inspectors in the Workflow Designer, when you are specifying the location in which to save a file.

Description. Enter the description, purpose or use of this store. To add a description or to add an alias to a store, see Modifying a Vantage Store.

Location. Enter the path manually or click Modify and navigate to the directory or share you are associating with this store. The path must be in valid drive-letter form: *C:\folder\folder* or in valid UNC form: *\\ComputerName\Sharename*.

Note: *If you select a local path directory, only services on the same computer can access it. Letter paths should only be used in a single-server domain.*

To provide access by all Vantage services in a multi-server domain, you must publish the directory as a share, then select the share here. UNC paths are required when your domain includes services that are distributed on multiple servers.

Additionally, some SAN systems exposes the shared drive as a letter (mapped) drive (for example, X:); that is visible on any client of the SAN. You can utilize SAN drives via a letter drive reference, provided that each Vantage server is a client of the SAN and that all mount points are the same letter.

Note: *If you are creating a store to hold proxy files viewed in the Vantage Workflow Portal, Telestream recommends that you reference the store with a UNC path. Some SAN clients do not allow frame-accurate representation of proxies when using shared drives.*

Folder Scheme. Select one of the options for folder naming when Vantage creates a folder for each new binder. When content is placed in a Vantage Store, Vantage creates a subfolder in the Store location to save the files in. If you select Identifier, the subfolder is named by autogenerating a GUID. Date uses the current time and date stamp, and Name+Date uses the content name plus the time and date. Here's an example of a Name+Date subfolder for a media file named *Butterfly*: *Butterfly_2010-09-17_01-59-50-5785*.

Click the OK to add this store to the Vantage Stores table and make it available for use in your workflows.

Modifying a Vantage Store

To change the configuration of a store, click on the store you want to modify. You can modify the Name, Description, and Location fields, as described in Adding and Configuring Vantage Stores.

Aliases. Optional field. An alias is alternate route to a store, defined by a URI. For example, you might browse to a store using a local view, and create a letter-based directory path. Or, you might browse to a store using a share, and create a share-based directory path. Browse to the store using the method you want and click OK to produce the URI. Vantage may use a URI if necessary to access a directory.

Files. Displays a list of files located in this store.

Make changes to the fields as necessary, and click the Save icon in the toolbar.

Deleting a Vantage Store

Click on the store you want to delete, click the Delete icon in the toolbar, and click OK to confirm.

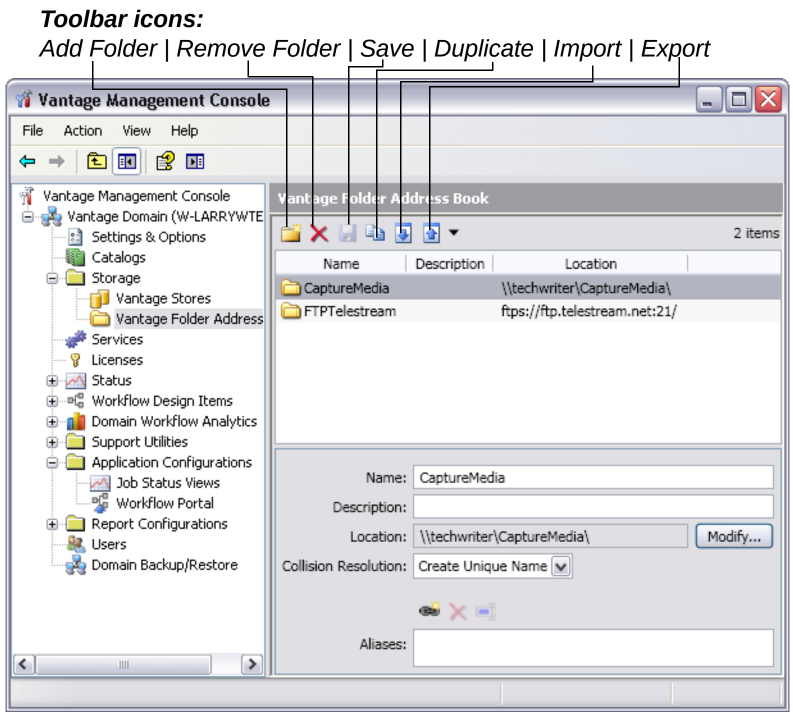
Note: *If there are any files in the store that are maintained by Vantage - that is, the job which generated the file has not expired, you can not delete it. Deleting a store permanently removes the store from the domain. It does not delete directories, shares, or any files in them.*

Managing Vantage Folder Address Books

Vantage address book folder management can be performed either in the console or in Vantage Workflow Designer.

To manage your address book's folders in the Management Console, open the Storage icon in the component panel and click Vantage Folders Address Book to display its details panel:

Figure 19. The Vantage Folders Address Book details panel.



You can use the Vantage Folders Address Book details panel to add and configure Vantage folders. You also use the details panel to modify and delete Vantage folders.

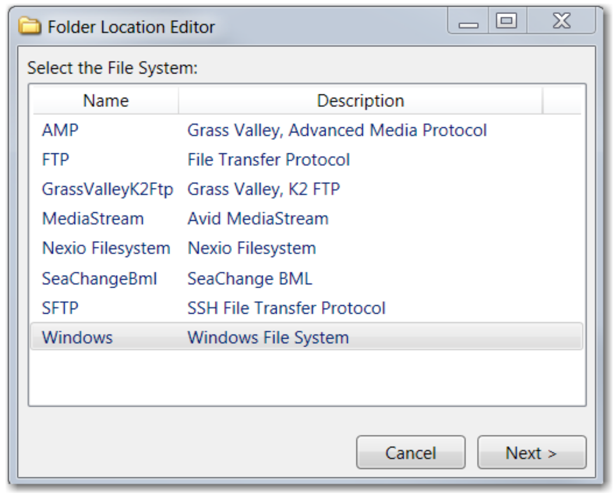
Adding and Configuring Vantage Folders

Click the Add Folder icon in the toolbar to display the Add New Folder dialog.

Name. Enter the name of the Vantage folder. This name is displayed in action inspectors where you are specifying the location in which to save a a nickname (which references a file).

Description. Enter the description, purpose or use of this store. To add a description or to add an alias to a store, see Modifying a Vantage Store.

Location. Click Modify and select the type of file system to which you want to assign the folder. Vantage asks what kind of file system you want to access, so it can load and utilize the proper file system navigation functionality.



Next, navigate to the directory or share you are associating with this folder. Or, enter it manually. The path must be in valid Letter drive form: *C:\\folder\folder* or in valid UNC form: *\\ComputerName\Sharename*.

Note: *If you select a local path directory in drive letter format, only services on the same computer can access it. Letter paths should only be used in single-server domain.*

To provide access to all Vantage services in a multi-server domain, publish the directory as a share, then select it here. UNC paths are only required if your domain includes services not all located on the same machine.

Additionally, some SAN systems exposes the shared drive as a letter (mapped) drive (for example, X:); that is visible on any client of the SAN. You can utilize SANs via a letter drive provided that you ensure that each Vantage server is a client of the SAN and that all mount points are the same letter.

Collision Resolution. When a file of the same name exists (a *collision*), select Overwrite to replace the existing file with the new one of the same name, without warning.

To preserve the existing file during a collision, select Create Unique Name. Vantage adds a numeric suffix on the root of the file name and saves it. For example, if Lake.xmv already exists, Vantage names the file Lake.1.wmv and saves it.

Click the Add icon in the toolbar to add this new folder to the Vantage Folders table and make it available for use in your workflows.

Modifying a Vantage Folder

Click on the folder you want to modify.

Description. Optional field. Update as necessary for your installation.

Aliases. Optional field. An alias is alternate route to a store, defined by a URI. For example, you might browse to a store using a local view, and create a letter-based directory path. Or, you might browse to a store using a share, and create a share-based directory path. Browse to the store using the method you want and click OK to produce the URI. Vantage may use a URI if necessary to access the directory.

Make changes to the fields as necessary, and click the Save icon in the toolbar.

Deleting a Vantage Folder

Click on the folder you want to delete, click the Delete icon in the toolbar, and click OK to confirm.

Note: *Deleting a folder permanently removes the folder from the domain. It does not delete directories, shares, or any files in them.*

Duplicating a Vantage Folder

Select the folder you want to duplicate, click the Duplicate icon in the toolbar. Select the duplicated folder, make the necessary changes and save it.

Importing & Exporting Authorization Records

Importing Folder Address Book Records. Click the Import icon in the toolbar to display a file system dialog, so you can select a folder address book records file. Navigate to the directory where the XML file is located. Select the file or files you want to import and click OK.

Exporting Folder Address Book Records. Click Export to display a file system dialog, so you can select the server and directory where you want to save each of the selected records as an XML file. The file by default is named the same as the first records name, but can be changed before saving it.

Note: *Changing the name of the XML file does not change the name of the record(s) in the XML file.*

SERVICES

Services, as used in Vantage, refers to Vantage running as Windows services, which are required to perform a given action in a workflow. The term *service* refers to the specific instance of the Windows service on a particular computer that is responsible for actually executing the actions specified in a workflow, when that workflow is executed as a result of a job submission to process a given media file.

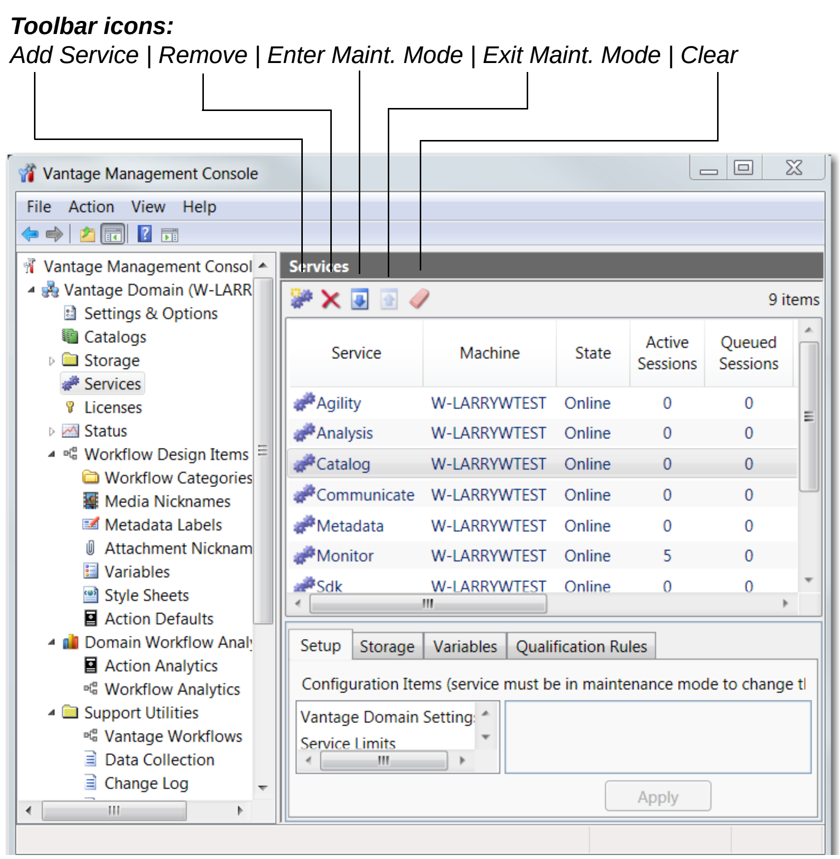
Use the Services component of the console to configure your Vantage services operating on various machines to function according to your requirements.

You can configure each service’s program settings, storage requirements, variables, and qualification rules.

Using the Services Details Panel

To manage Vantage services, click the Services component icon in the component panel to display its details panel:

Figure 20. The Vantage services details panel.



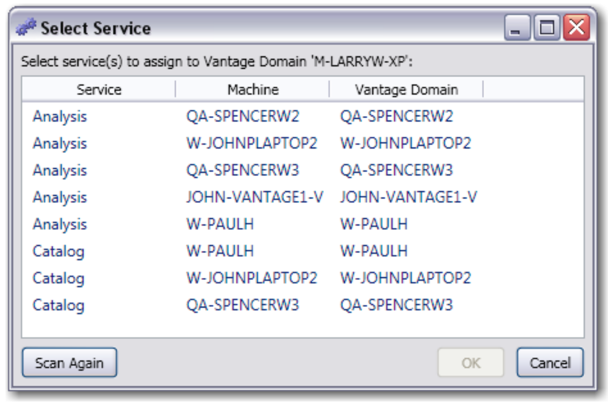
You can use the services details panel to add services to the domain and configure them, and to remove them from the domain.

Adding a Service to the Domain. To add a Vantage service to a domain, it must first have been installed and started on a computer on your network subnet.

Next, click the Add Service icon (far left) in the toolbar.

Management Console scans the network for available services and displays those that are not currently part of this domain.

Figure 21. The Vantage services Add Services panel.



Select the service you want to add to the current domain and click OK.

Services are added to a domain by removing them from the domain they are currently in. Services can not be part of more than one domain at a time. Be sure that the other domain is prepared to lose the service you are adding to your domain.

Removing a Service from the Domain. To remove a Vantage service to a domain, select in and click the Remove icon in the toolbar.

Note: *Removing a service does not stop or uninstall the service from any computer. It merely disengages it from the current domain.*

Maintenance Mode You can enter and exit maintenance mode by selecting a service and clicking the Enter or Exit icon. When a service is in maintenance mode it quiesces the service, and it will not process any transactions. Exit maintenance mode to re-activate the selected service and cause it to reload its resources from the database.

Clear Click the Clear icon to reset the Service Metrics History. This also resets all failed service metrics for the selected services.

Configuring Vantage Services

Vantage services have a variety of configuration options; most of them with default settings. To review or change the current settings, select the service and click each tab: Setup, Storage, Variables, and Qualification Rules.

Setup

The Setup tab includes Vantage database settings, service ports, instrumentation, time-out settings and log file options.

Changing settings in the Setup tab requires that you restart the service before they take effect. You can make changes to settings in the other tabs without restarting the service - they take effect immediately. To modify the settings in the Setup tab, select the service you want to modify and click the Enter Maintenance mode icon in the toolbar. After making the changes, click the Exit Maintenance mode icon in the toolbar. Exit maintenance mode to re-activate the selected service and cause it to reload its resources from the database so it can begin accepting jobs again.

Changes to these settings can only be made in maintenance mode.

Click on each category in the Setup tab to display its settings.

Table 1. Setup Tab

Vantage Domain Settings	
Host	Name of the computer on which this domain database is installed. Not changeable.
Failover	Name of the optional failover database instance that serves as the failover database should the primary database fail. This is the name of the mirrored database server (i.e. "BackupServer").
Instance	Name of the primary Vantage database instance.
Database	Name of the database.
User	Username of the MS SQL Server database user. Default: *sa*. Do not change the user name or password unless you have created a user with *db_owner* access for the Vantage instance in Microsoft SQL Server.
Password	Password of the database user. Default: *vantage12!* Do not change the user name or password unless you have created a user with *db_owner* access for the Vantage instance in Microsoft SQL Server.
Service Limits	
Session Limit	Maximum number of concurrent sessions. For CPU-intensive sessions - such as transcode sessions - you should gate the maximum number to the power of the computer. For others, such as the Monitor service, a higher number is less likely to cause problems. For services other than Transcode, it is unlikely that adjusting the session limit will improve performance of the domain.

Table 1. Setup Tab

Target Resource Usage	**Master Control | Enterprise Control** The target (optimum, ideal) number of resources used. The target resource usage should be approximately equal to the total resource usage which is the sum of resource cost of all currently executing transactions.
Service Settings	
TCP Port	The TCP port is utilized for all intra-service traffic in the domain. If a certain port range is allowed by your IT infrastructure (given constraints such as routers and firewalls) an IT administrator can specify which port to use for intra-service communication to fit their environment.
HTTP Port	The HTTP port is utilized for HTTP server traffic in the domain. An IT administrator can specify which port to use for intra-service communication to fit their environment.
Instrumentation Settings	
Enable Instrumentation	Registers and reports certain internal events as Windows Management instrumentation events.
Service Timeout	
Timeout	The time (in minutes), that a non-responsive task will run before being terminated and failed.
Log File Settings	
Log File Name	The base name of the log file generated by this service. Log files are generated by service, and are stored in each service's folder in *<installdrive(C:)>\Program Files\Telestream\<Service Folder>*.
Log File Size	The maximum file size (in bytes) before the service creates an incrementally-numbered log file for continued logging.
Max Log File Count	The maximum number of log files for this service, before the oldest is deleted when a new one is written.

Storage

The Storage tab enables you to specify stores for a service to provide a repository so that their actions can obtain storage if they require it. Certain actions require storage where they can create temporary files or perform other operations that involve writing files to disk.

For example, the Transcode service requires access to a store in order to produce the files that it creates as part of the transcode process.

The process of assigning a specific store to a service is made with performance in mind. If you know you want a particular Transcode service to utilize a specific store, you can assign it here. In the absence of an assigned store for Transcode service, service will utilize any Vantage store it chooses to write temporary files to. This may not be optimal based upon your network topology.

Adding Stores. To add a store to the selected service, click the Add Store icon, select the store from the Select Storage dialog and click OK.

Removing Stores. To remove a store from the selected service, select the store and click the Delete icon in the toolbar.

Variables

Use the Variables tab to attach variables to a service, which it can provide to workflows, for use in actions when executing jobs.

You add variables to a service when you want to use the variable's value in a workflow to identify some characteristic or metric of the specific service to which the variable is attached.

When you add a variable to a service, you supply a constant value - one that does not change over time, or by job. Said differently, the value of the variable is static for this instance.

For example, you may want to implement email generation in the event of a transcode failure in a large domain with 20 separate transcode services, each running on separate machines. This allows a user to receive an email when a transcode fails that identifies the machine where the failure occurred.

To implement this, you create a variable named *EmailSubject* (select Domain > Templates > Variables). Next, you add the *EmailSubject* variable to each Transcode service here, in the Services > Variables tab, and set the value of *EmailSubject* to a combination of the machine name and the service name by typing it in manually in the Value field. For example, one might be named *M-ORION-XP-VantageTranscodeService*.

Now, in each workflow, you add a message action and specify the email option, configuring the Subject line with the *EmailSubject* variable and set the Message action to only run on a Failure state.

Now, if a transcode failure occurs, the user receives an email indicating which system was transcoding the media when the failure occurred.

Adding Variables. To add a variable to the selected service, click the Add Variable icon, select the variable from the Select Variable dialog and click OK. Next, enter the static value for this variable in the Value field. When you click away, the Save Variable dialog displays. Click Yes to save this variable and its value.

Removing Variables. To remove a variable from the selected service, select the variable and click the Delete icon in the toolbar.

Caution: Deleting a variable that is used in workflows may render the workflow inoperable.

Qualification Rules

Qualification rules enable you to influence the assessment of a given service's fitness to process tasks in a job. Qualification rules enable a service to compare variable values set by the workflow against a baseline value, generate a merit value based on the comparison, and use the merit value in conjunction with other variables to determine which service should process the job.

Qualification rules can be based on system variables (such as *Priority*) and user-defined variables (for example, *File Size*). You can create multiple qualification rules per service to fine-tune each service's fitness to perform certain tasks and improve over-all domain workflow and performance.

For example, you have a large domain with 20 transcoding services on different machines. Your goal is to divide the transcoding services in to groups: those that process the bulk of the jobs - those involving media of less than about 80MB in size. Another group is configured to optimally transcode media up to 2GB, another for long-form files, over 2GB.

To implement this, you create a variable named *FileSize* (Select Domain > Templates > Variables).

Next, you select the service that you want to run short jobs here, in Services > Qualification Rules, and create a qualification rule.

Select the *FileSize* variable and click OK. Configure the rule to specify operator = less than or equal, merit = 100 (an arbitrary value), qualifier = required, and value = 80,000,000. This rule will pass the merit value of 100 to Vantage when a job being considered for execution has a FileSize variable with a value less than or equal 80,000,000.

For each other transcode service, add a similar rule (or rules) to qualify it appropriately.

Now, in each workflow, add an identify action before each transcode action and configure it to update the *FileSize* variable with the File Size metric.

When a job starts, the Identify action updates the *FileSize* variable, and each transcode service examines the variable against its comparison value to determine its fitness to process the transcode action, and if true, submits its merit value, if false, submits merit value 0 to Vantage for final arbitration on which transcode service is assigned the job.

Adding Qualification Rules. To add a qualification rule to the selected service, click the Add Qualification Rule icon, select the variable from the Select Variable dialog and then configure the rule:

Operator. Select an operator from the dropdown list to qualify the variable's value being compared against the baseline value specified in the rule. If the equation is true, the merit value you supply is passed; if the equation is false, 0 is passed.

Merit. Enter an integer value which is passed to Vantage for consideration in determining a given service's fitness to perform a job.

Merit values should be consistent with a predetermined plan of implementation, so that each service is responding appropriately to influence the distribution of tasks. If you have few services and rules values from 1 to 10 may provide enough granularity; for lots of services and/or rules, you may need values from 1 to 100 to provide enough granularity,.

Qualifier. Choose Optional when workflows may or may not provide a value for comparison. If no value is provided, the comparison always is false, and 0 merit is provided. Choose Required when workflows must provide a value for comparison. If no value is provided, the service rejects the request to process the job without further analysis.

Value. Enter the baseline value against which the variable’s value is to be compared. (A null value is a valid value.)

Removing Qualification Rules. To remove a qualification rule from the selected service, select the rule and click the Delete icon in the toolbar.

Licenses

Telestream provides Vantage licenses to enable a specific set of capabilities in a Vantage domain. A single license file activates capabilities for every server in the domain - functionality that you specified in your license request. Production licenses can only be used by one Vantage Domain at a time; when they are activated, they become locked to the MSSQL Server Vantage database instance that is operating, and remain locked until deactivated.

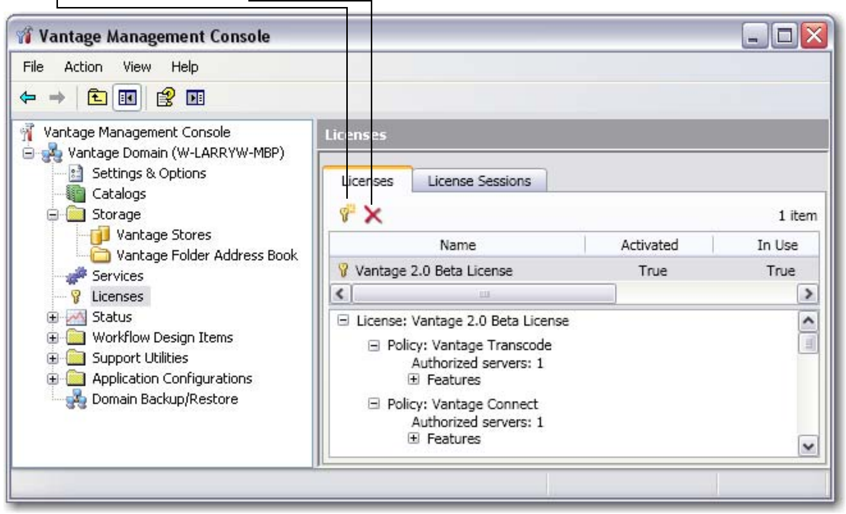
When you receive a license file from Telestream, save the license in a user-specified folder directly on the target Vantage server or on a share. When the license is first activated, it is stored in the database; the file itself is not utilized to operate Vantage on a continuing basis.

Using the Licenses Details Tab

To manage your Vantage licenses, click the Licenses icon under the Vantage domain in the component panel, and click on the License tab. The console displays the Licenses details panel:

Figure 22. The Licenses details Licenses panel.

Toolbar icons:
Add License | Remove License



You use the Licenses details panel to add a license to the domain and activate them. You also use the details panel to remove them from the domain.

Select a license to open and view the policies in this license and the associated capabilities it enables.

Adding and Removing a License

Adding a License. To add a license to a domain, you must first save the license file on a computer on your network. Typically, licenses are saved one of the computers in the domain, in the C:\Program Files\Telestream\Vantage\ directory. If you have multiple licenses, you can save them in a \License directory you create.

Note: *Once the license is imported into the Vantage Domain and activated, the file itself is not used by Vantage. However, you should keep a backup copy of the license file in case you want to move the license to another database at a future time.*

Next, click the Add License icon (far left) in the toolbar. The console displays the Add License dialog. Navigate and select one or more licenses to add to the domain and click Open.

If this computer has an Internet connection, the license activates automatically. If there is no Internet connection, you will be prompted for activation steps via telephone; follow them and type in the activation code you're provided.

The activated license is stored in the Vantage database for use by all Vantage services and clients in the domain.

Note: *You should remove a license from one domain before you use it in another domain - you can't use the same license in more than one domain at a time.*

Removing/Deactivating a License. To de-activate a license in a domain, click the Remove License icon in the toolbar. Click Yes in the warning dialog to confirm.

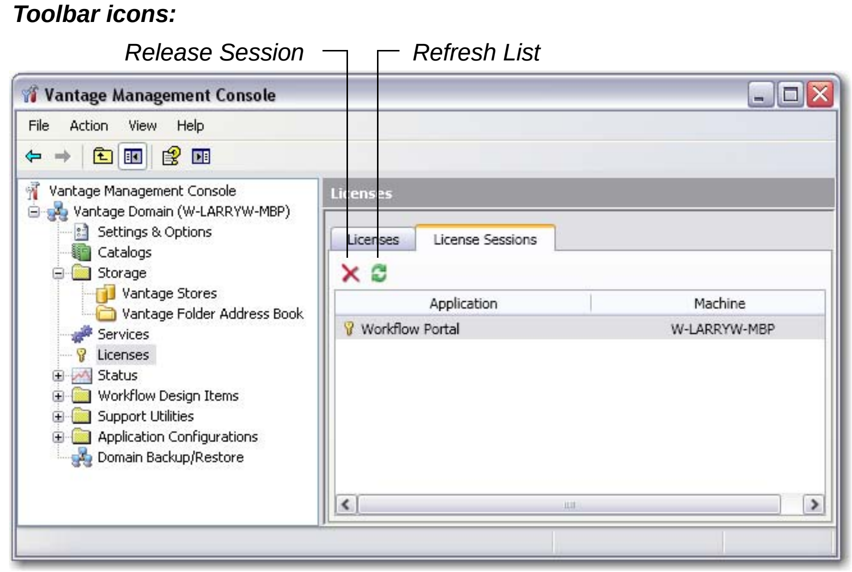
When you remove a license, Vantage attempts to deactivate it. A license should only be removed if you intend to install the same license on a different Vantage domain. In this case, the removal process also attempts to deactivate the license. The deactivation process will indicate that the license may be loaded on a different domain. If a license is not deactivated prior to adding it to another Vantage Domain, an error occurs - indicating that the license is currently in use on a different Vantage domain and that it can not be activated a second time.

Note: *Before deactivating a license, all jobs using the license should be stopped, and all services using the license should be put into Maintenance Mode. Otherwise, the license will report being in use.*

Using the License Sessions Tab

To manage your Vantage license sessions, click the Licenses icon under the Vantage domain in the component panel, and click on the License Sessions tab. The console displays the License Sessions details panel:

Figure 23. The Licenses details License Sessions panel.



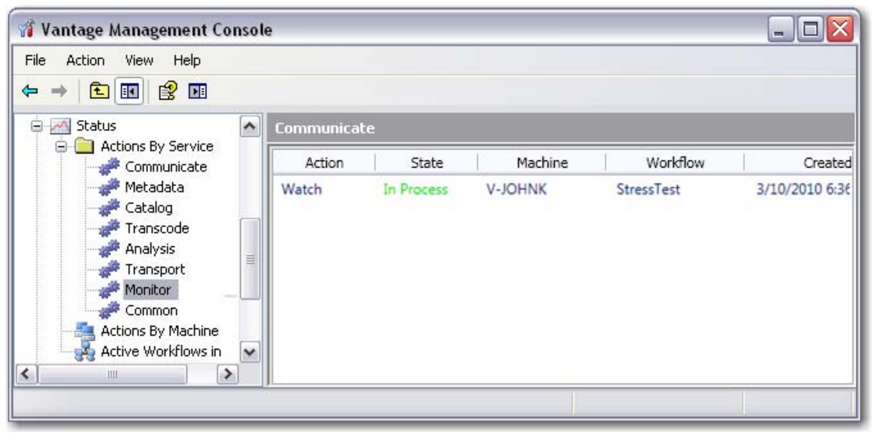
Resetting a License Session

To reset a license session for Workflow Portal (which may be necessary because the connection to the client application was lost, or because it quit unexpectedly), select the session and click the Stop (red X) icon.

STATUS

Use the Status component to monitor the real-time state of services in this domain. You can view all jobs in the domain, or you can view them by service or by machine.

Figure 24. The Actions details table for the selected service.



Action Table. The action table displays a list of all actions for the selected service or machine, or active/failed workflows in the domain. Each entry contains the action, state, machine, workflow, job, created timestamp, updated timestamp, and description.

You can sort all table entries in ascending or descending order by column: machine, or state, for example.

Viewing Actions by Service

To view all jobs executing in the domain, filtered by a specific service type (the transcode service, for example), open Actions by Service and select the service type in the list to display the actions table with entries for this service's actions.

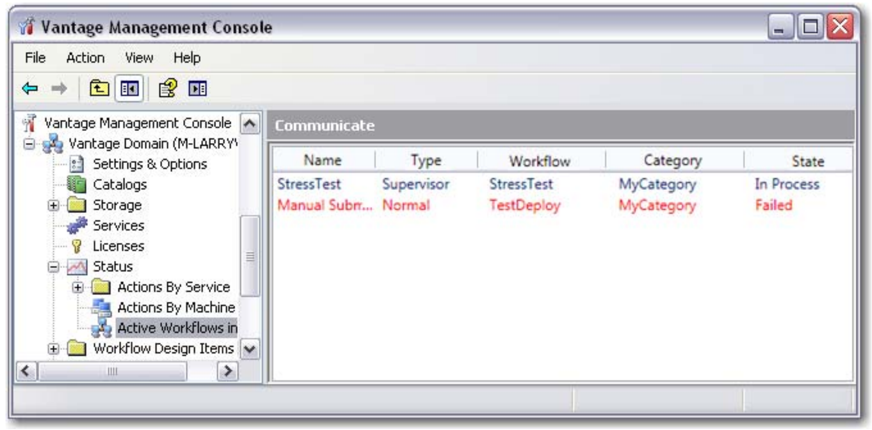
Viewing Actions by Machine

To view all jobs executing in the domain, filtered by a given machine, open Actions by Service and select the machine in the list to display the actions table with entries for the selected machine.

Viewing Active Workflows in Domain

To view all jobs executing in the entire domain, plus all jobs that have failed, select Active Workflows in Domain in the component panel to display the action table.

Figure 25. The Status details panel for the domain.



Workflow Design Items

Use the Workflow Design Items component to create, configure, and manage all of the templates used in Vantage workflows, including:

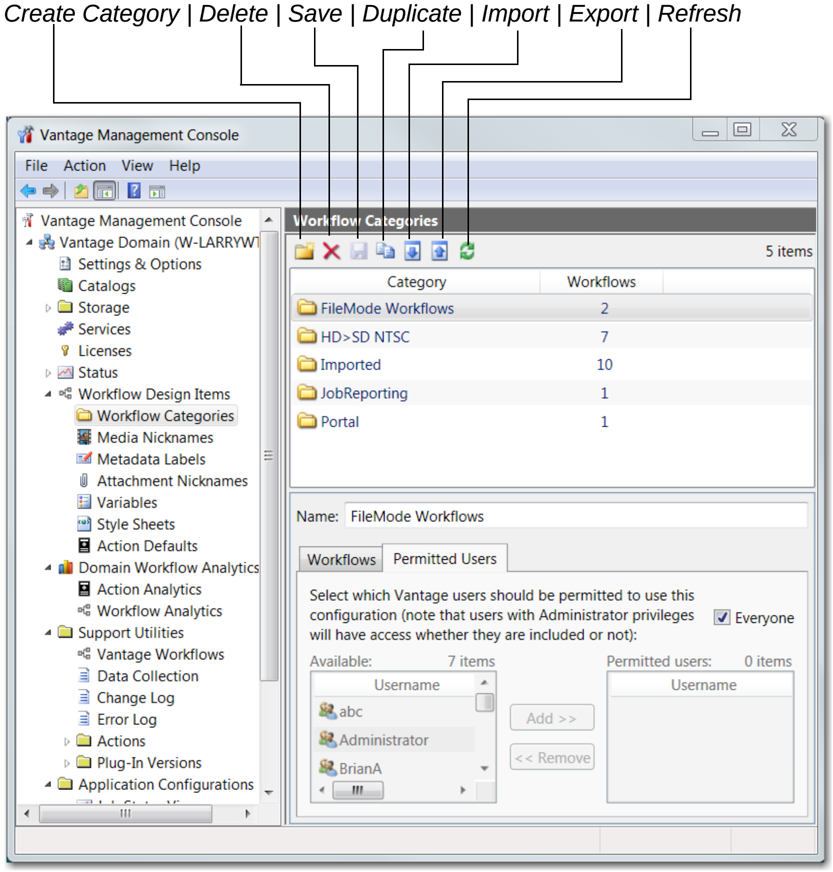
- Workflow Categories
- Media Nicknames
- Metadata Labels
- attachment nicknames
- variables
- Stylesheets
- Action Defaults

Workflow Categories

Workflow categories are folders that contain workflows. These folders can be created or deleted in the Workflow Designer or in the Management Console. The Management Console, additionally, enables you to duplicate, import, or export category folders.

Figure 26. Workflow Categories panel

Toolbar icons:
Create Category | Delete | Save | Duplicate | Import | Export | Refresh



Create Click the Create icon to create a new category (folder). Categories can also be created in the Workflow Designer.

Delete Click the Delete icon to delete a category (folder). A warning about loosing all workflows in this category is displayed to prevent accidental removal of workflows.

Save Click the Save icon to save changes made in user permissions. If changes are not saved, you will be prompted to save upon leaving that category.

Duplicate Click the Duplicate icon to duplicate a selected category. Only the category (folder) is duplicated. None of the workflows in the folder are duplicated. However, all of the user permission are duplicated in the new folder.

Import Click the Import icon to display a file system dialog, so you can select a category file. Navigate to the directory where the category XML file is stored, select the file (or files) you want to import, then click OK.

Note: *You can not import two categories that are named the same - the file name is not the name of the category - the category name is stored in the XML file. Thus, you can't duplicate an exported category file and rename it, then import it under the new file name.*

Export Click the Export icon to display a file system dialog to select the server and directory where you want to save the selected category as an XML file. The file by default is named the same as the category name, but can be changed before saving it.

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

Refresh Click the Refresh icon to update the list of categories.

Media Nicknames

Media nickname templates are generally managed in the console. You can also create media nicknames in Workflow Designer; but the Management Console allows media nicknames to be fully defined, including a definition.

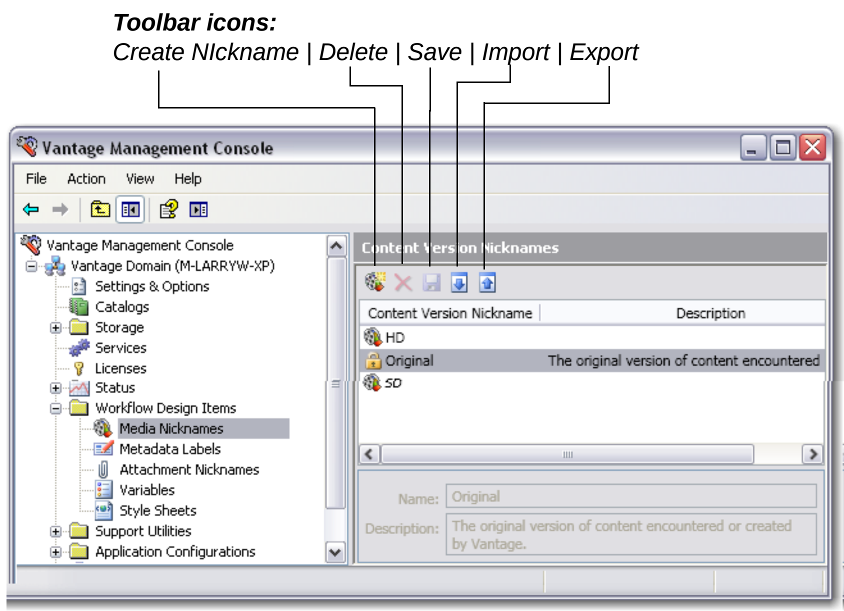
Nicknames enable you to tag a specific media file with a convenient name, which you can use to reference the file and use it in workflow actions.

In Vantage workflows, when you provide a media nickname, you can construct a workflow that allows the identification and manipulation of media files via the nickname you assign.

Using the Media Nicknames Details Panel

To manage media nicknames in Vantage, click the Media Nicknames icon under Workflow Design Items in the component panel. The console displays the Media Nicknames details panel:

Figure 27. The Media Nicknames details panel.



Creating Nicknames

Creating a Nickname. To create a new nickname, click the Create Nickname icon (far left) in the toolbar. The Management Console displays a Create Media Nickname dialog. Enter the name of this nickname and click OK.

The Management Console adds this nickname to the table. Optionally, add a description and click the Save icon.

Deleting Nicknames

To permanently delete a nickname from the domain, click the Remove icon in the toolbar. Click Yes in the warning to confirm.

Note: *When you delete a nickname, it will render services and workflows inoperable if the nickname was used in it. Be sure to modify all actions and services that used the nickname you just deleted.*

Importing and Exporting Nicknames

Importing Nicknames. Click the Import icon in the toolbar to display a file system dialog, so you can select a nickname file. Navigate to the directory where the nickname XML file is stored. Select the file or files you want to import and click OK.

Note: *You can not import two nicknames that are named the same - the file name is not the name of the nickname - the nickname name is stored in the XML file. Thus, you can't duplicate an exported nickname file and rename it, then import it under the new file name.*

Exporting Nicknames. Click Export to display a file system dialog, so you can select the server and directory where you want to save each of the selected nicknames as an XML file. The file by default is named the same as the nickname name, but can be changed before saving it.

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

Metadata Labels

Metadata labels are structures that define, hold, and identify *contextual* metadata (vs. tracks, which are *temporal* metadata). Metadata labels enable Vantage users to define a specific schema for typing and organizing individual data and groups of data related to the media, that can be utilized in a Vantage workflow for data entry and processing.

Labels enable you to represent an idea that may applied to a wide variety of media files, or it may be unique to a specific user's workflow. Labels publish this idea into a scheme that may be utilized in workflows. Metadata labels also enable users to enter specific values in each field of the label for processing.

Metadata labels have a name, and are comprised of one or more fields. Each field has a name as well. Each field defines and holds data values of various types: text, dates, timecodes, numbers, etc.

You can construct labels to represent an idea that may be unique to a specific user's workflow and implement this idea into a construct for use in a Vantage workflow.

Vantage provides a comprehensive list of industry-standard metadata labels for use in Vantage workflows.

You can also define a custom scheme by creating a label - adding and configuring individual fields in the label, and grouping them together.

Often, users generate labels when they require a specific, named value and use it to generate a variable to influence the workflow behavior. For example the frame label composed of two parameters *FrameWidth* (720), and *FrameHeight* (480) can be used to assign 720 to the variable *FrameWidth* and 480 to the variable *FrameHeight*. These variables can be used by other actions to influence the workflow behavior.

For example, you may create a workflow that processes long files (in excess of 30 minutes, for example) on one server, medium files (6 minutes up to 30 minutes) on another, and all clips under 60 minutes on yet another server.

Another common use of labels is to provide a searchable context for values extracted during the processing of a workflow.

Finally, labels can be assigned to media without values, and data entry operators can enter metadata values during job processing for insertion into the media (depending on the format) or saved externally in a sidecar XML file.

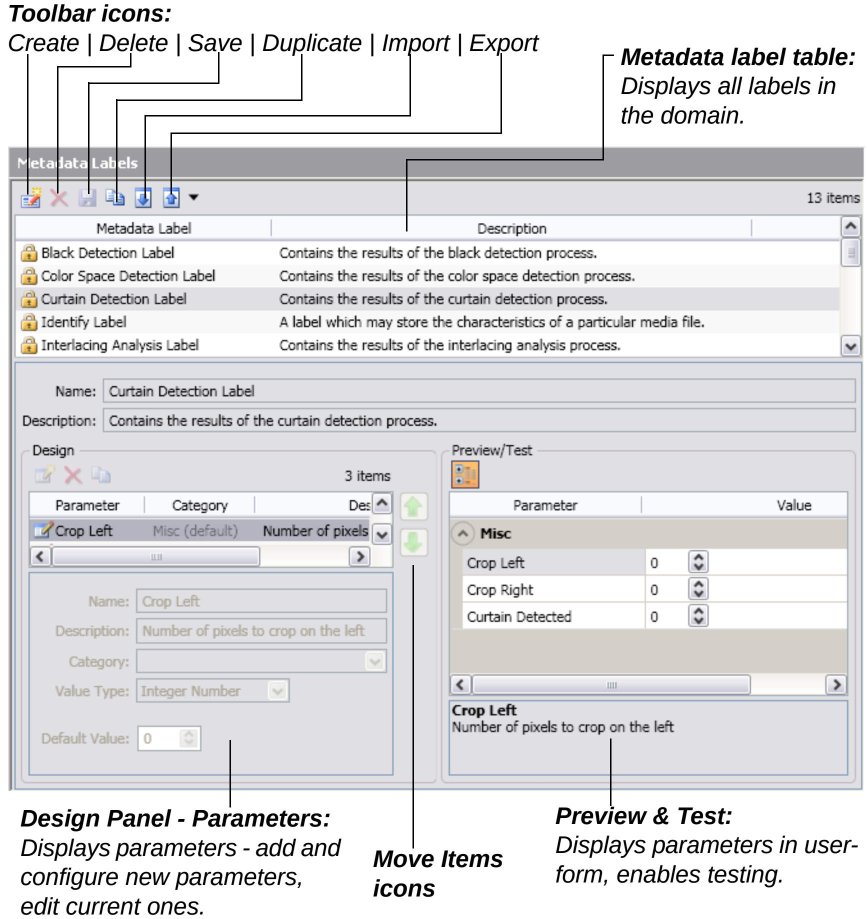
In both cases, users define (or specify) a specific label schema, and then provide a stylesheet (XSLT file) to allow values in an attachment (discovered via an associate/watch action) to be converted into a label. The stylesheet provides the mapping between the contents of the attachment and specific fields in the label.

A metadata action can copy specific fields into a variable, (for example, the Title field value *Wizard of Oz* is assigned to the Title variable). Or, a label may be utilized for contextual searches for material that matches a specific query. (since labels have a very defined structure, you can structure queries around looking for fields of a specific value).

Using the Metadata Labels Details Panel

To manage metadata labels in Vantage, click the Metadata Labels icon under Templates > Content Definitions in the component panel:

Figure 28. The Metadata Labels details panel.



The console displays the Metadata Labels details panel (detail panel shown separately to preserve detail).

Creating and Modifying Metadata Labels

Creating a Metadata Label. To create a new metadata label, click the Create Metadata Label icon (top left) in the toolbar.

Next, name the label and enter a description. Metadata label names are case-sensitive. For example, *FrameHeight* and *frameheight* are different labels.

Now, in the lower left corner of the details panel (the Design panel), add the parameters to group in this label.

Adding/Modifying Label Parameters

Click the Create Parameter icon in the design toolbar, and enter values in the name, description. Create or select a category - parameters with the same category are grouped together for user presentation.

Select a value type and set the options and a default value for the selected type.

Previewing and Testing. Preview your metadata label in the Preview & Test panel to the right. Click icon under Preview/Test once to display your label with categories; click again to display it without categories.

Save the Label. When the label is complete, click the save icon at the top of the Metadata Labels window.

Modifying a Metadata Label. To modify a label or its parameters, select the label, make your changes, and click Save again.

Moving Metadata Label Parameters. To change the order of the label parameters up or down in the list, select a parameter and click the green up or down arrow on the right side of the label list. Categories will display according to the order of the first parameter in each category.

Deleting Metadata Labels

To permanently delete a metadata label template from the domain, click the Remove icon in the toolbar. Click Yes in the warning to confirm.

Note: *When you delete a metadata label, it will render services and workflows inoperable if the label was used in it. Be sure to modify all actions and services that used the label you just deleted.*

Duplicating a Metadata Label

Often, its easier to duplicate and rename a metadata label and make minor changes, than it is to create a new one. To duplicate a label, select it and click the Duplicate icon in the toolbar. Enter the new name (and make any other changes you need to) and click Save.

Importing and Exporting Metadata Labels

Importing Metadata Labels. Click the Import icon in the toolbar to display a file system dialog, so you can select a label file. Navigate to the directory where the label XML file is stored. Select the file or files you want to import and click OK.

Exporting Metadata Labels. Click Export to display a file system dialog, so you can select the server and directory where you want to save each of the selected variables as an XML file. The file by default is named the same as the variable name, but can be changed before saving it.

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

Attachment Nicknames

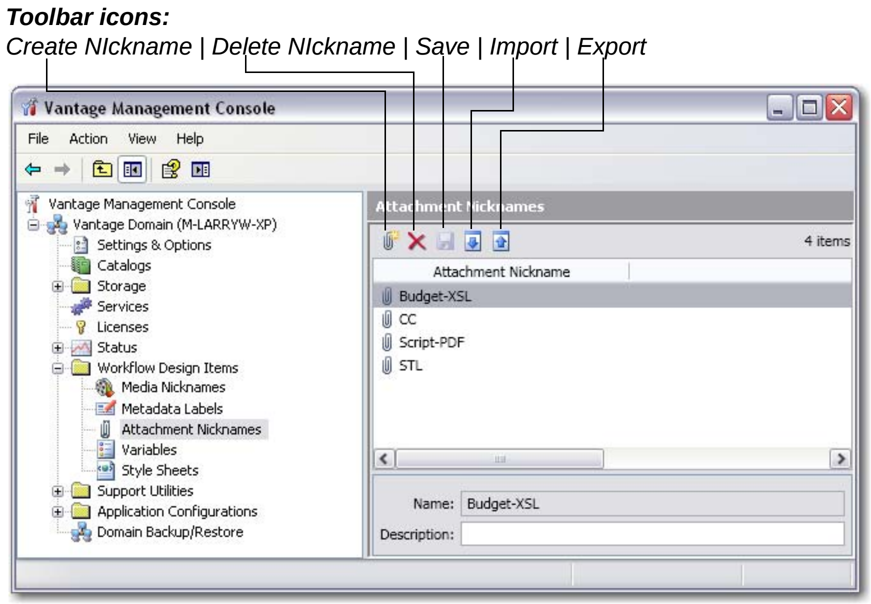
Like media nickname templates, attachment nickname templates are managed in the Management Console. You can also create attachment nicknames in Workflow Designer; but the Management Console allows media nicknames to be fully defined, including a definition.

Nicknames enable you to tag a specific attachment version with a convenient name, which you can use to reference the content and use it in workflow actions. In Vantage workflows, when you provide an attachment nickname, you can construct a workflow that allows the identification and manipulation of attachment files via the nickname you assign.

Using the Attachment Nicknames Details Panel

To manage attachment nicknames in Vantage, click the Attachment Nicknames icon under Templates > Content Definitions in the component panel. The console displays the Attachment Nicknames details panel:

Figure 29. The Attachment Nicknames details panel.



Creating Nicknames

Creating a Nickname. To create a new nickname, click the Create Nickname icon (far left) in the toolbar. The Management Console displays a Create Attachment Nickname dialog. Enter the name of this nickname and click OK.

The Management Console adds this nickname to the table. Optionally, add a description and click the Save icon.

Deleting Nicknames

To permanently delete a nickname from the domain, click the Remove icon in the toolbar. Click Yes in the warning to confirm.

Note: *When you delete a nickname, it will render services and workflows inoperable if the nickname was used in it. Be sure to modify all actions and services that used the nickname you just deleted.*

Importing and Exporting Nicknames

Importing Nicknames. Click the Import icon in the toolbar to display a file system dialog, so you can select a nickname file. Navigate to the directory where the nickname XML file is stored. Select the file or files you want to import and click OK.

Note: *You can not import two nicknames that are named the same - the file name is not the name of the nickname - the nickname name is stored* *in the XML file. Thus, you can't duplicate an exported nickname file and rename it, then import it under the new file name.*

Exporting Nicknames. Click Export to display a file system dialog, so you can select the server and directory where you want to save each of the selected nicknames as an XML file. The file by default is named the same as the nickname name, but can be changed before saving it.

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

Variables

Variables in Vantage are similar to variables in programming languages. You can create a variable, name it, assign and change values, and use them in workflow actions and services.

You create variables and assign default values in the Management Console. When you plan to use a specific variable in an action (for example, identifying the video frame rate of content), you must first create it in the Management Console.

The template value is only utilized by an action in a workflow when the variable has not been assigned a value in the executing workflow prior to its use in the action.

For example, you need a variable named Email so that you can add an email action to a workflow. But, you want the email address to send the email to a single address most of the time - you don't want to set it in every workflow. So, you create an Email variable here in the console, and set the value to foo@mycompany.com.

Now, add an email action into your workflow use the Email variable in the To address.

When the workflow executes, if no other instance of the Email variable is created during execution, then the email will be sent to foo@mycompany.com.

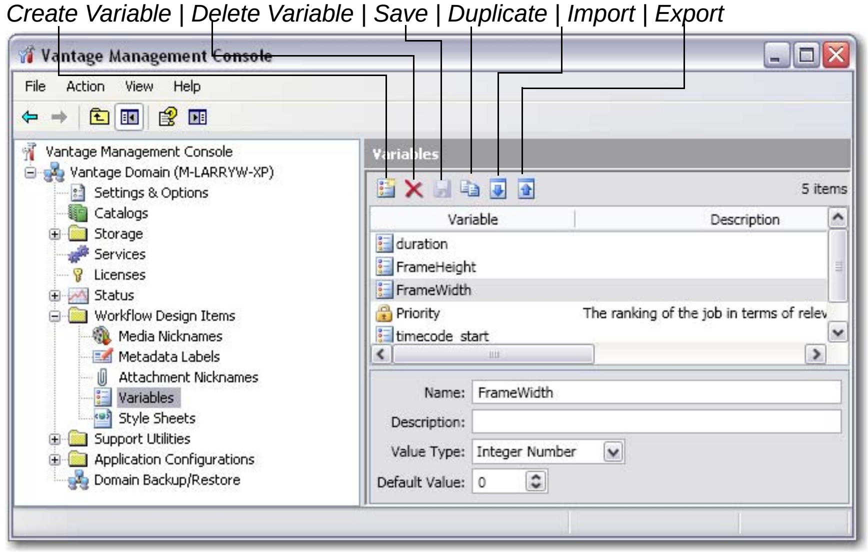
However, If an action/service adds the Email variable to the job and sets a specific value, when the email action is executed the value of this copy of the variable is used.

Using the Variables Details Panel

To manage variables in Vantage, click the Variables icon under Templates in the component panel. The console displays the Variables details panel:

Figure 30. The Variables details panel.

Toolbar icons:
Create Variable | Delete Variable | Save | Duplicate | Import | Export



Creating and Modifying Variables

Creating a Variable. To create a new variable, click the Create Variable icon (far left) in the toolbar.

Next, provide a name for the variable. Variable names are case-sensitive. For example, FrameHeight and frameheight are different variables.

Next, enter a functional description, and select the type of variable you’re creating from the dropdown menu. Finally, specify a default value. The description and default values are optional.

To complete the variable and add it to the table, click Save.

Modifying a Variable. To modify a variable, select the variable, make your changes, and click Save again.

Note: *When you modify a variable, it may render your service or workflow inoperable because of how the variable was implemented. Be sure to modify all services/actions that use the variable.*

Deleting Variables

To permanently remove a variable from the domain, click the Remove icon in the toolbar. Click Yes in the warning to confirm.

Note: *When you delete a variable, it will render services and workflows inoperable if the variable was used in it. Be sure to modify all actions and services that used the variable you just deleted.*

Duplicating a Variable

Often, its easier to duplicate and rename a variable than it is to make a new one. To duplicate a variable, select it and click the Duplicate icon in the toolbar. Enter the new name (and make any other changes you need to) and click Save.

Importing and Exporting Variables

Importing Variables. Click the Import icon in the toolbar to display a file system dialog, so you can select a variable file. Navigate to the directory where the workflow XML file is stored. Select the file you want to import and click OK.

Note: *You can not import two variables that are named the same - the file name is not the name of the variable - the variable name is stored in the XML file. Thus, you can't duplicate an exported variable file and rename it, then import it under the new file name.*

Exporting Variables. Click Export to display a file system dialog, so you can select the server and directory where you want to save each of the selected variables as an XML file. The file by default is named the same as the variable name, but can be changed before saving it.

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

Stylesheets

Stylesheet templates enable you to load and manage the stylesheets that are available for use in Vantage workflows. Each stylesheet template has a nickname to make it easy to assign stylesheets to a specific workflow.

Stylesheets (XSL files) are the keystone of metadata actions. Stylesheets enable you to convert one attachment file (XML) into a different attachment (XML file) or to convert the contents of an attachment into a custom label schema and vice-versa.

When you are processing media with metadata in a specific XML format and you are creating a workflow to convert the XML file into a different format or into a specific contextual metadata structure (for example, a label); you will need to provide a stylesheet to perform the transformation.

When you add a new stylesheet to your Vantage domain, the stylesheet itself is wrapped in a second XML file, providing a structure for the Vantage metadata: the name, description and identifying GUID.

When you export stylesheets, the entire XML file (the wrapper and the actual stylesheet inside it) is saved. When you import a previously exported stylesheet, you are importing an entire wrapper back into the domain.

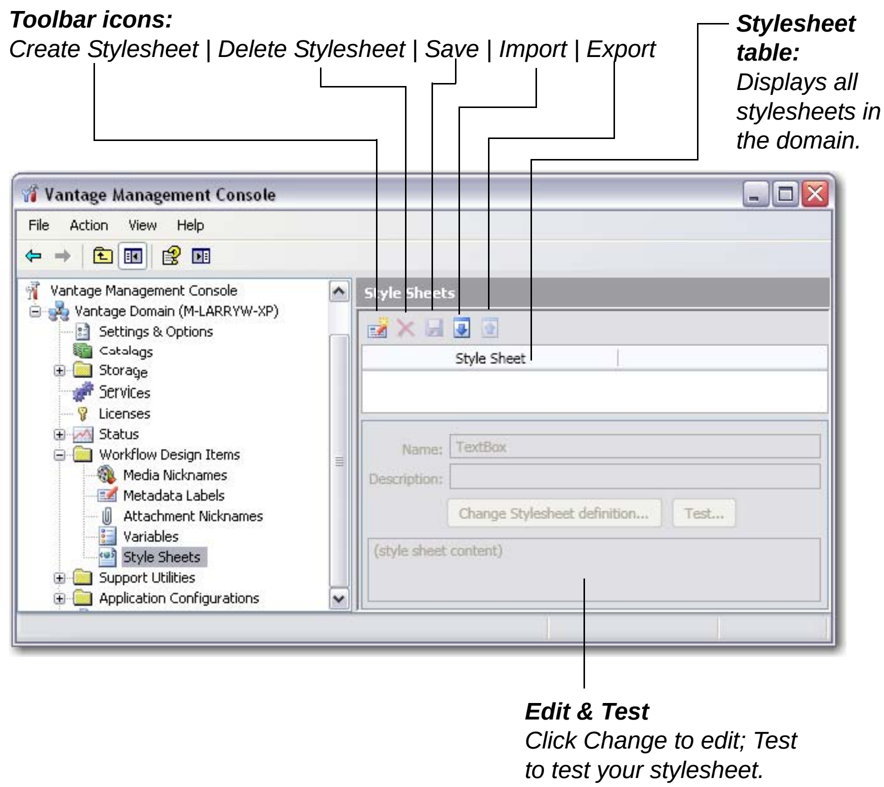
To replace the actual stylesheet inside a stylesheet already registered in the domain, use Change Stylesheet definition.

Note: *Stylesheets and metadata transformation advanced concepts. If you require assistance in implementing specific metadata transformations, please contact your customer service representative at Telestream to discuss custom stylesheets for your specific workflow requirements.*

Using the Stylesheets Details Panel

To manage your stylesheets in Vantage, click the Stylesheets icon under Workflow Design Items in the component panel. The console displays the Stylesheets details panel:

Figure 31. The Stylesheets details panel.



Adding and Modifying Stylesheets

Adding a Stylesheet. To add a new stylesheet to the domain, click the Add stylesheet icon (far left) in the toolbar. The console displays a file system dialog, so you can select a stylesheet (XSL) file. Navigate to the directory where the file is stored. Select the file you want to import and click OK.

The Management Console adds the new stylesheet to the table.

Next, name the stylesheet and enter a description.

Save the Stylesheet. When you're done, click Save.

Renaming a Stylesheet. To rename a stylesheet definition, select it in the table and edit the name to meet your requirements. Then, click the Save icon in the toolbar.

Modifying a Stylesheet. To modify a stylesheet definition, copy the original XSL file and edit it to meet your requirements in a suitable XML editor. Then, save the file.

Click on Change Stylesheet Definition. The console displays a file system dialog, so you can select the stylesheet (XSL) file. Navigate to the directory where the file is stored. Select the file you want to replace the current file with, and click OK.

The Management Console updates the stylesheet with the new file reference.

Deleting Stylesheets

To permanently remove a stylesheet from the domain, click the Remove icon in the toolbar. Click Yes in the warning to confirm.

Note: *When you remove a stylesheet from the domain, the XSL file is not erased - its reference is removed from the Vantage database. Removing a stylesheet will render services and workflows inoperable if the stylesheet was used in it. Be sure to modify all actions and services that used the stylesheet you just deleted.*

Importing and Exporting Stylesheets

Importing Stylesheets. Click the Import icon in the toolbar to display a file system dialog, so you can select a stylesheet XML file - you can not import XSL files - only stylesheets that have been previously exported as XML files. Navigate to the directory where the file is stored. Select the file or files you want to import and click OK.

To add new stylesheets, use the Add function.

Note: *You can not import two stylesheets that are named the same - the file name is not the name of the stylesheet - the stylesheet name is stored in the XML file. Thus, you can't duplicate an exported stylesheet file and rename it, then import it under the new file name.*

Exporting Stylesheets. Click Export to display a file system dialog, so you can select the server and directory where you want to save each of the selected stylesheets as an XML file. The file by default is named the same as the stylesheet name, but can be changed before saving it.

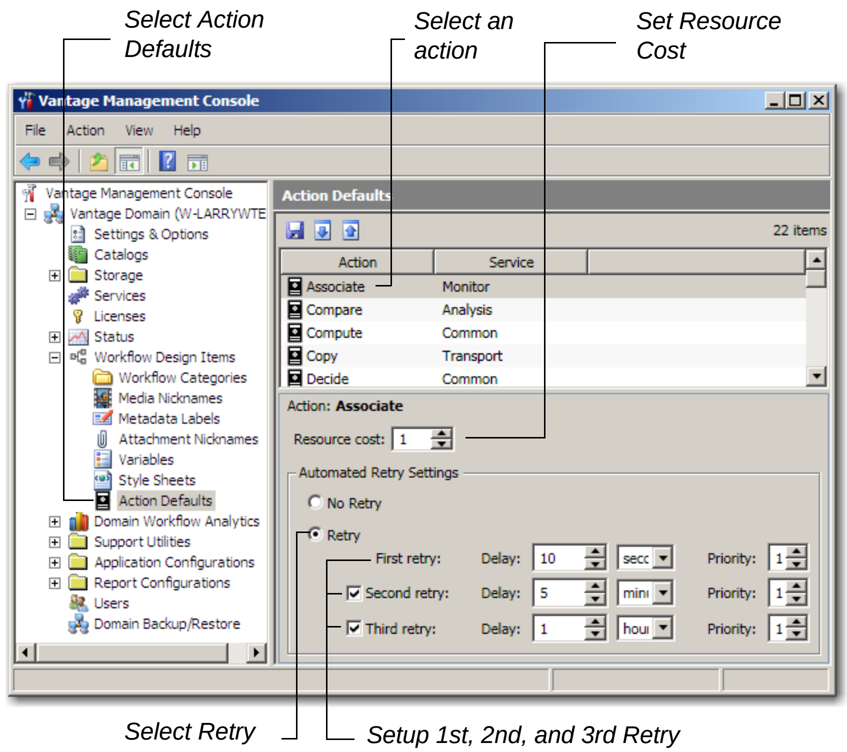
Note: *Changing the name of the XML file does not change the name of the stylesheet in the XML file.*

Action Defaults

Master Control | Enterprise Control

Action Defaults provide a way to set default Resource Cost and Retry settings for Vantage workflow actions. To do this, open the Action Defaults panel by selecting Workflow Design Items > Action Defaults, and selecting an action displayed in the list of actions:

Figure 32. Action Defaults



Resource Cost

Enter the desired Resource Cost value.

Note: *For a complete explanation of the theory and application of Resource Costs, see the Vantage Enterprise Guide.*

To improve load balancing, each action has a resource cost assigned by action type. In addition, you can configure a specific action in a workflow, and assign it a custom resource cost.

Resource costs are integer values, that have an ordinal relationship to one another. You can implement any scale you want in your domain. Greater scales enable finer-grained control.

When using resource cost values, services are better utilized by assigning them actions to be executed based on the total resource cost of their current actions, as compared to their target resource cost capacity.

To view or set a resource cost on a given action, right-click and select Resource Cost. Workflow Designer displays the Resource Cost Setting dialog.

Retry Settings

This feature is enabled in Vantage Master Control and Enterprise Control.

Actions which fail during the execution of a workflow attempt to retry according to user-specified rules.

Default retry rules are set for each action *type* in the Management Console, but they can be modified in Workflow Designer for individual actions within a workflow, and override the default retry rules specified in the Management Console. Default retry rules are displayed in actions implemented in workflows in Workflow Designer.

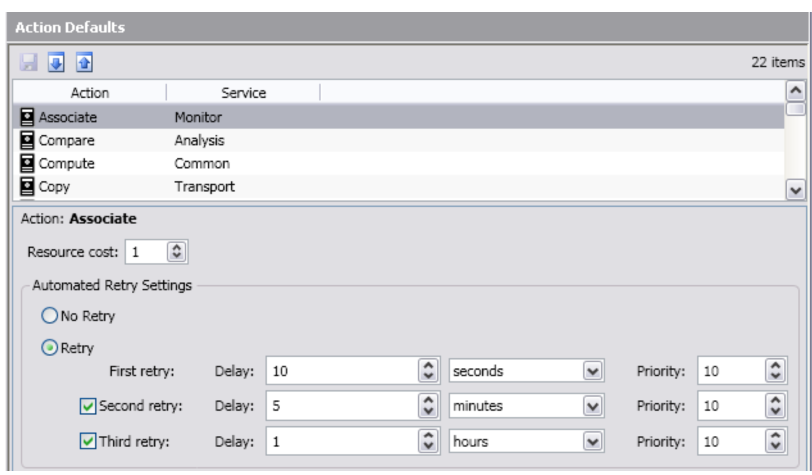
For example, a user might specify (in the Management Console) that all Encode actions retry one time, after five minutes. They might subsequently specify that a particular encode action in a workflow will retry three times.

Or, a user may specify that a Copy action should retry three times: once after five minutes (in case of a SAN blip), once after four hours (in case of Internet congestion), and once after two days (in case of complete Internet failure).

It is important to keep in mind that individual action retry rules specified in Workflow Designer override the default retry rules specified in the Management Console. If an action does not have specific retry rules specified, the default retry rules for the action type will be used instead. If there are no rules specified for an action, and no default rules for its action type, then a failed action is not retried.

To view or set default retry settings on an action type, click Workflow Design Items > Action Defaults. The Management Console displays the Retry Settings details panel.

Figure 33. Action Default Retry Settings



Select the action type to view or modify and set the following:

No Retry | Retry. Select No Retry to override any default retry settings, and not retry execution on failure. Select Retry to activate the automated retry settings (see Automated Retry Settings below).

Automated Retry Settings

First Retry. Specify the delay time value and time unit (seconds | minutes | hours | days) and specify the execution priority.

Second Retry. Check Second Retry, and specify the delay time value and time unit (seconds | minutes | hours | days) and specify the execution priority.

Third Retry. Check Third Retry, and specify the delay time value and time unit (seconds | minutes | hours | days) and specify the execution priority.

Click OK to save.

Importing and Exporting Action Defaults

Action Defaults can be imported or exported.

Importing Action Defaults. Click the Import icon in the toolbar to display a file system dialog, so you can select an Action Default file. Navigate to the directory where the XML file is stored. Select the file you want to import and click OK.

Note: *You can not import two Action Defaults that are named the same - the file name is not the name of the Action Defaults - the name is stored in the XML file. Thus, you can't duplicate an exported Action Defaults file and rename it, then import it under the new file name.*

Exporting Action Defaults. Click Export to display a file system dialog, so you can select the server and directory where you want to save the Action Defaults as an XML file. The file by default is named the same as the Action Default name, but can be changed before saving it.

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

Domain Workflow Analytics

Workflow Analytics is a Vantage Enterprise Control and Master Control feature which enables you to visually analyze workflows and job history to identify problems and improve overall system performance.

Enterprise Control Master Control

In Workflow Designer, Workflow Analytics enables you to view jobs (based on the job history currently in the domain database)) on a case-by-case basis to:

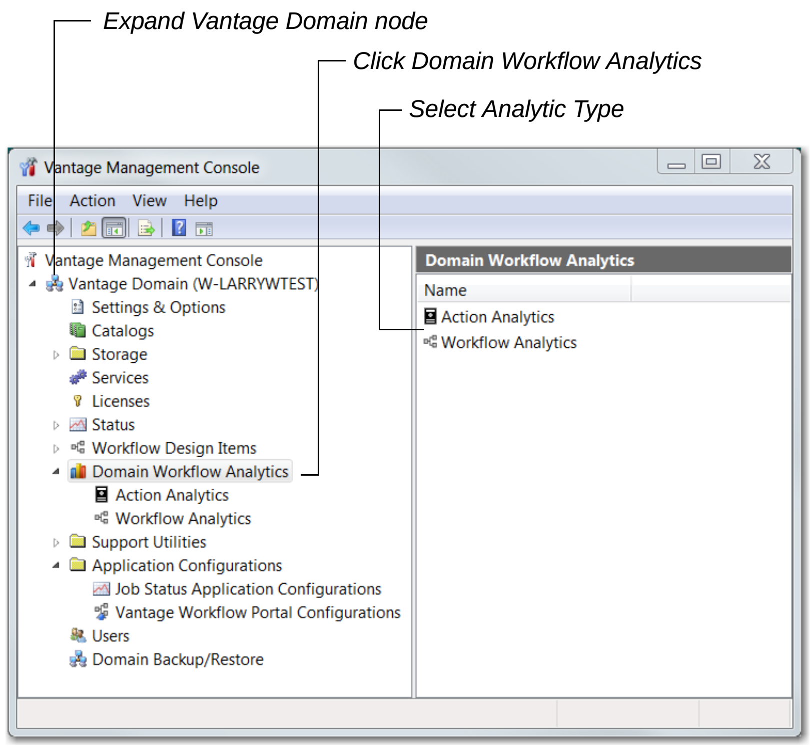
- Identify performance bottlenecks by action in a workflow
- Analyze workflow execution by action in a workflow

Note: *For details on how to use Workflow Analytics in the Vantage Designer, click the Help icon in the toolbar to display the Designer help system.*

In the Management Console, Workflow Analytics enables you to view all actions and workflows (based on the job history currently in the domain database) to stack-rank workflows and actions to identify primary CPU resource consumers within a domain. You can use this information to modify workflow design and improve Vantage domain performance and efficiency.

To view the Domain Workflow Analytics expand the Vantage Domain node, click Domain Workflow Analytics, and select either Action or Workflow analytics:

Figure 34. Domain Workflow Analytics Window

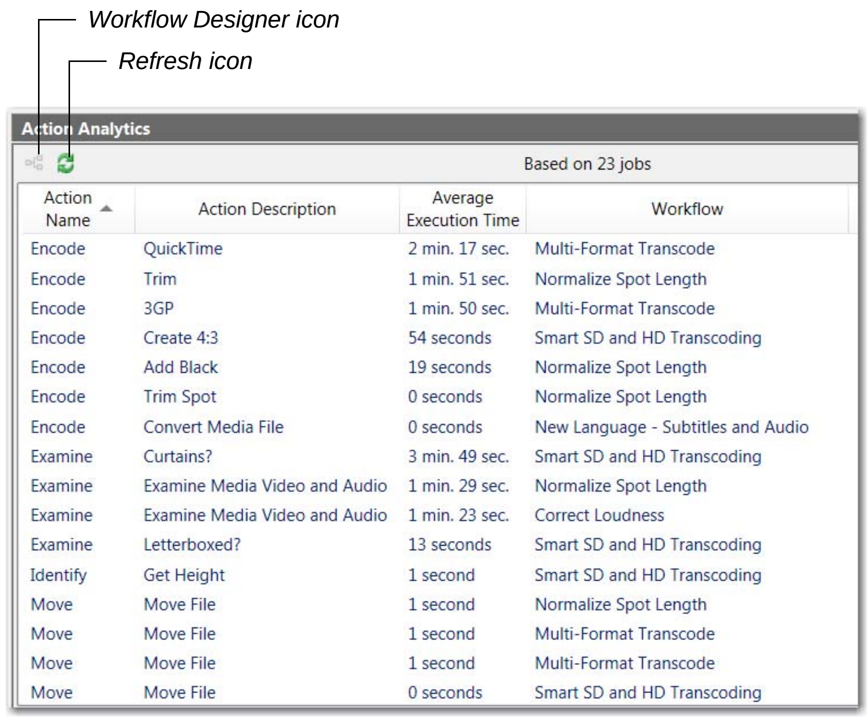


Two kinds of analytics are available in the Management Console: Action Analytics and Workflow Analytics.

Action Analytics

Action Analytics presents average execution times of all actions in selected workflows. Actions are identified by name, description, and associated workflow.

Figure 35. Action Analytics Window.



Action Name	Action Description	Average Execution Time	Workflow
Encode	QuickTime	2 min. 17 sec.	Multi-Format Transcode
Encode	Trim	1 min. 51 sec.	Normalize Spot Length
Encode	3GP	1 min. 50 sec.	Multi-Format Transcode
Encode	Create 4:3	54 seconds	Smart SD and HD Transcoding
Encode	Add Black	19 seconds	Normalize Spot Length
Encode	Trim Spot	0 seconds	Normalize Spot Length
Encode	Convert Media File	0 seconds	New Language - Subtitles and Audio
Examine	Curtains?	3 min. 49 sec.	Smart SD and HD Transcoding
Examine	Examine Media Video and Audio	1 min. 29 sec.	Normalize Spot Length
Examine	Examine Media Video and Audio	1 min. 23 sec.	Correct Loudness
Examine	Letterboxed?	13 seconds	Smart SD and HD Transcoding
Identify	Get Height	1 second	Smart SD and HD Transcoding
Move	Move File	1 second	Normalize Spot Length
Move	Move File	1 second	Multi-Format Transcode
Move	Move File	1 second	Multi-Format Transcode
Move	Move File	0 seconds	Smart SD and HD Transcoding

Workflow Designer Icon Click the Workflow Designer icon to open the Workflow Designer.

Refresh Icon Click the Refresh icon to update the list of actions.

Action Name This column displays all of the actions in the workflows.

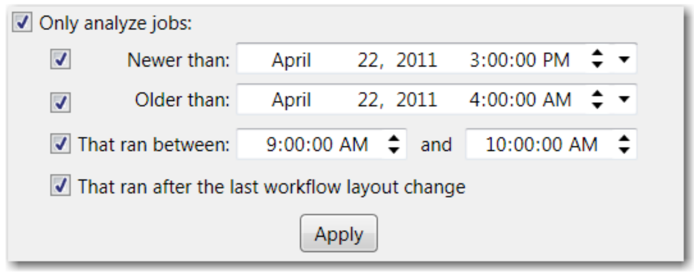
Action Description This column displays the descriptions that are associated with each action.

Average Execution Time This is the average execution time of the named action for all workflows.

Workflow The name of the workflow that contains the named action.

The set of workflows to be analyzed can be selected by checking the *Only analyze jobs* checkbox, checking other checkboxes that apply, and changing dates and times.

Figure 36. Action Analytics Selection Panel



Newer than and Older than Workflows within a range of dates and times can be selected by checking *Newer than* and *Older than* checkboxes and setting the dates and times accordingly.

That ran between Workflows between a beginning and end time can be selected by checking the *That ran between* checkbox and setting the times.

That ran after Check the *That ran after* check box to select all workflows that ran after the last workflow layout change.

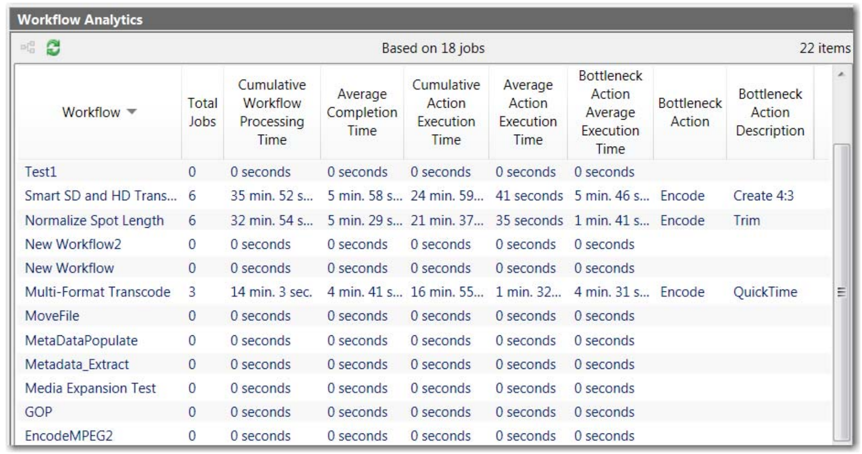
Click Apply to save any changes.

Workflow Analytics

Workflow Analytics presents information about workflow job history. A list of workflows is displayed along with statistical information about each workflow (total number of jobs, execution time, etc.) based on the job history of each workflow. You can right-click on any workflow and select Open Workflow to launch (or display, if already running) the Workflow designer, showing the selected workflow.

Note: *If the Workflow Designer is already running and is hidden behind another window when a workflow is requested, the Windows task bar icon will flash indicating that the Workflow Designer has something new to display.*

Figure 37. Workflow Analytics Panel.



Workflow Analytics

Based on 18 jobs 22 items

Workflow	Total Jobs	Cumulative Workflow Processing Time	Average Completion Time	Cumulative Action Execution Time	Average Action Execution Time	Bottleneck Action Average Execution Time	Bottleneck Action	Bottleneck Action Description
Test1	0	0 seconds	0 seconds	0 seconds	0 seconds	0 seconds		
Smart SD and HD Trans...	6	35 min. 52 s...	5 min. 58 s...	24 min. 59...	41 seconds	5 min. 46 s...	Encode	Create 4:3
Normalize Spot Length	6	32 min. 54 s...	5 min. 29 s...	21 min. 37...	35 seconds	1 min. 41 s...	Encode	Trim
New Workflow2	0	0 seconds	0 seconds	0 seconds	0 seconds	0 seconds		
New Workflow	0	0 seconds	0 seconds	0 seconds	0 seconds	0 seconds		
Multi-Format Transcode	3	14 min. 3 sec.	4 min. 41 s...	16 min. 55...	1 min. 32...	4 min. 31 s...	Encode	QuickTime
MoveFile	0	0 seconds	0 seconds	0 seconds	0 seconds	0 seconds		
MetaDataPopulate	0	0 seconds	0 seconds	0 seconds	0 seconds	0 seconds		
Metadata_Extract	0	0 seconds	0 seconds	0 seconds	0 seconds	0 seconds		
Media Expansion Test	0	0 seconds	0 seconds	0 seconds	0 seconds	0 seconds		
GOP	0	0 seconds	0 seconds	0 seconds	0 seconds	0 seconds		
EncodeMPEG2	0	0 seconds	0 seconds	0 seconds	0 seconds	0 seconds		

Each workflow displays the following information about it:

Workflow Name. The name of the workflow as it was defined in the Workflow Designer.

Total Jobs. The total number of jobs (in a selected group) that have run using the named workflow

Cumulative Workflow Processing Time. The total execution time for all selected workflows

Average Completion Time. Total Completion Time divided by Total Jobs.

Cumulative Action Execution Time. The total execution time of all actions in a workflow.

Average Action Execution Time. Total Action Execution Time divided by the number of actions in the workflow.

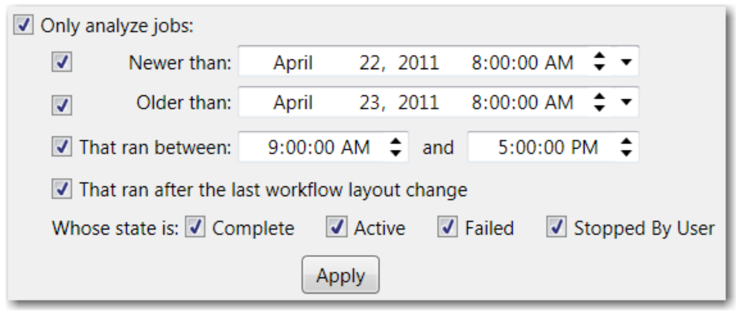
Bottleneck Action Average Execution Time. The longest action execution time in the workflow.

Bottleneck Action. The name of the bottleneck action. If there is no apparent bottleneck, no action is listed (blank).

Bottleneck Action Description. Description associated with the bottleneck action.

The set of workflows to be analyzed can be selected by checking the *Only analyze jobs* checkbox, checking other checkboxes that apply, and changing dates and times.

Figure 38. Workflow Analytics Selection Panel



Newer than and Older than Workflows within a range of dates and times can be selected by checking *Newer than* and *Older than* checkboxes and setting the dates and times accordingly.

That ran between Workflows between a beginning and end time can be selected by checking the *That ran between* checkbox and setting the times.

That ran after Check the *That ran after* check box to select all workflows that ran after the last workflow layout change.

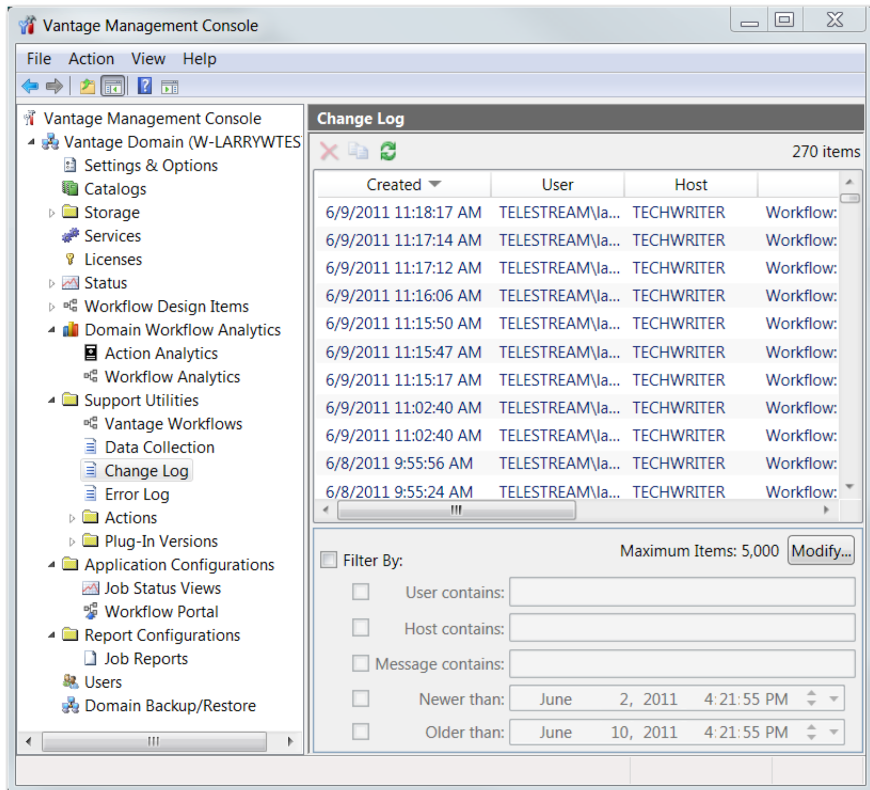
Whose state is Check any combination of the four provided state checkboxes to select a set of workflows. (See the *Vantage Workflow Designer User Guide* for the definitions of these states).

Click Apply to save any changes.

Support Utilities

Vantage provides utilities to import and export workflows, collect important information about your domain and send this data to Telestream Customer Service to help diagnose and solve a problem, as well as perform other important tasks to help you manage your domain effectively.

Figure 39. Support Utilities Panel



To copy selected log entries to the clipboard first select the log entries to copy. Then, click the Copy button in the toolbar, select Copy from the context menu, or use the control-C keyboard command.

Vantage Workflows. Displays the workflows in this domain.

Data Collection. Enables you to log point-in-time details about a selected service into a log file for diagnostics purposes.

Change Log. Enables you to track changes to the domain by time, user, and host - for example, adding or removing services, or changing, starting, or stopping workflows.

Error Log. Enables you to track errors that occur in the domain by time, source, and host.

Actions. Displays the list of actions in the domain by service, including which workflow the action is in. Enables you to export and import individual actions.

Plug-in Versions Displays the list of plugins in the domain by service, including their version number.

Vantage Workflows

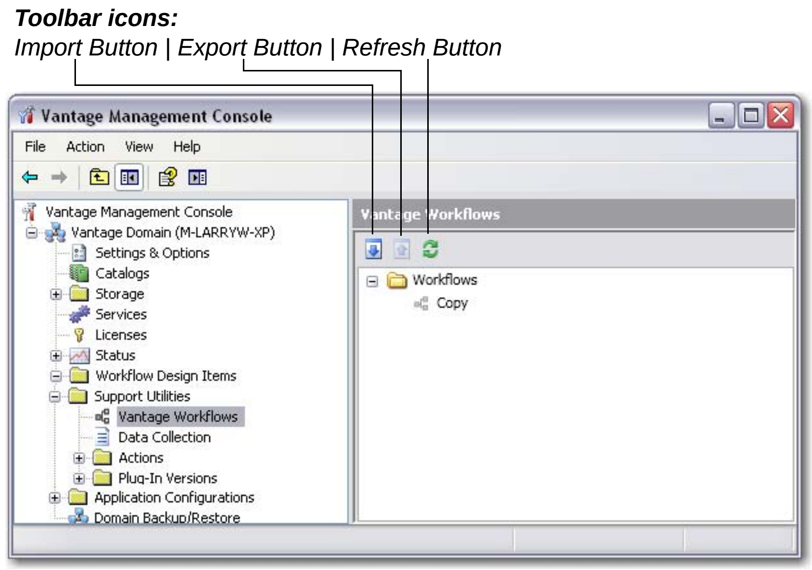
Use the Vantage Workflows utility to import and export your workflows. Workflows are saved as XML files - there is one workflow per file.

For example, you may want to export some workflows to send to a colleague at another station to replicate the same workflow. Or, you may want to export a workflow to import it into another domain for testing purposes.

Or, during a troubleshooting session with Telestream customer service, you may be asked to send the workflow in question to Telestream for clarity and review.

Click the Vantage Workflows icon under the Support Utilities icon in the component panel to display its details panel:

Figure 40. The Vantage Workflows details panel.



Import. Click the Import icon in the toolbar to display a file system dialog, so you can select a workflow file. Navigate to the directory where the workflow XML file is stored. Select the file you want to import and click OK.

Note: *You can not import two workflows that are named the same - the file name is not the name of the workflow - the workflow name is stored in the XML file. Thus, you can't duplicate an exported workflow file and rename it, then import it under the new file name. To duplicate a workflow, perform the task in Vantage Workflow Designer.*

Imported workflows are saved in the Imported workflow category, which is created during the import if it does not exist. You can move imported workflows to other categories using Vantage Workflow Designer.

Export. Click Export to display a file system dialog, so you can select the server and directory where you want to save the workflow as an XML file.

The file by default is named the same as the workflow name, but can be changed before saving it.

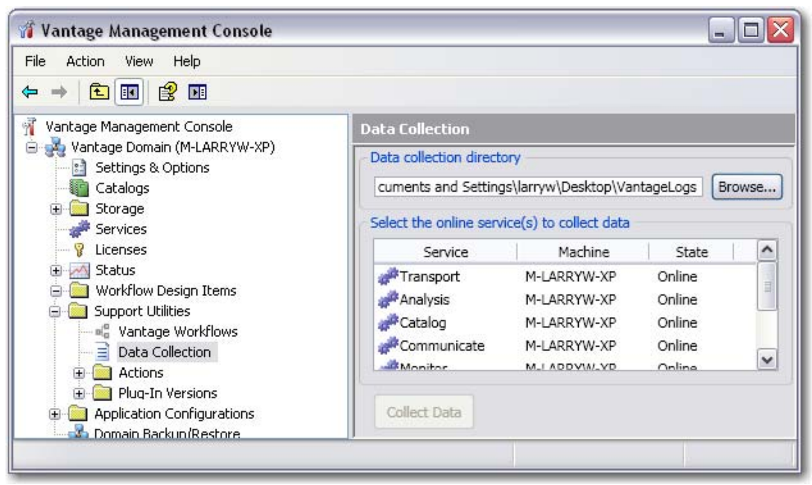
Note: *Changing the name of the XML file does not change the name of the workflow in the XML.*

Data Collection

The Data collection utility enables you to collect relevant information about selected services for transmission to Telestream during a troubleshooting session.

Click the Data Collection icon under the Support Utilities icon in the component panel to display its details panel:

Figure 41. The Data Collection details panel.



To collect data for one or more services, select the service (option-click to select multiple) and click Collect data. Files named for each service are saved in the specified directory.

Vantage writes the files out as <ServiceType>.txt and displays a dialog to notify you of the location of the file so that you can open and read the file or send it to others for analysis.

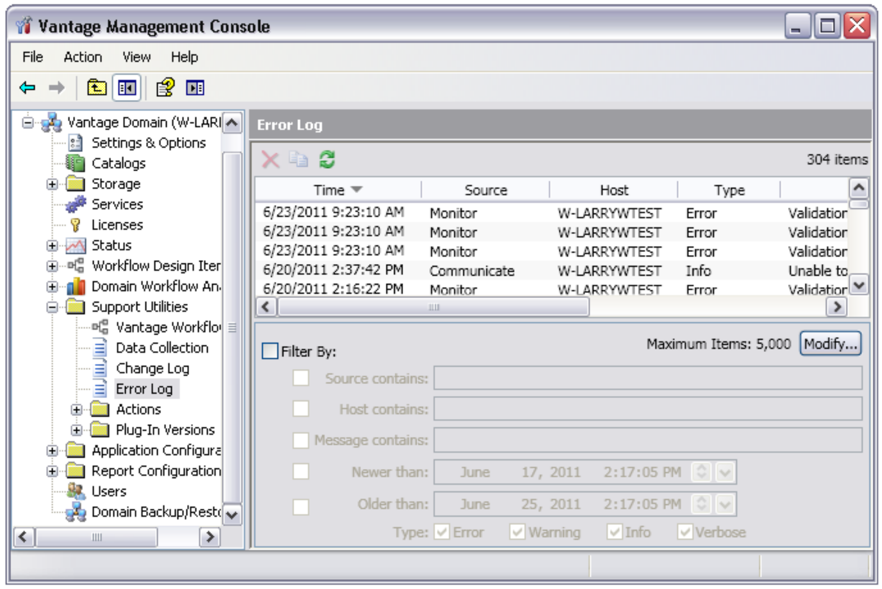
You can email these files to Telestream for assistance in solving problems during troubleshooting sessions.

Change Log

The Change Log utility enables you to track changes to the domain by time, user, and host - for example, adding or removing services, or changing, starting, or stopping workflows.

Click the Change Log icon under the Support Utilities icon in the component panel to display its details panel:

Figure 42. The Change Log details panel.



Delete. Select one or more change log records, and click Delete to remove them from the database.

Copy. Select one or more change log records, and click Copy to place these records on the clipboard as text, so that they can be pasted into other applications - for example, a spreadsheet.

Refresh. Click to update the table from the database.

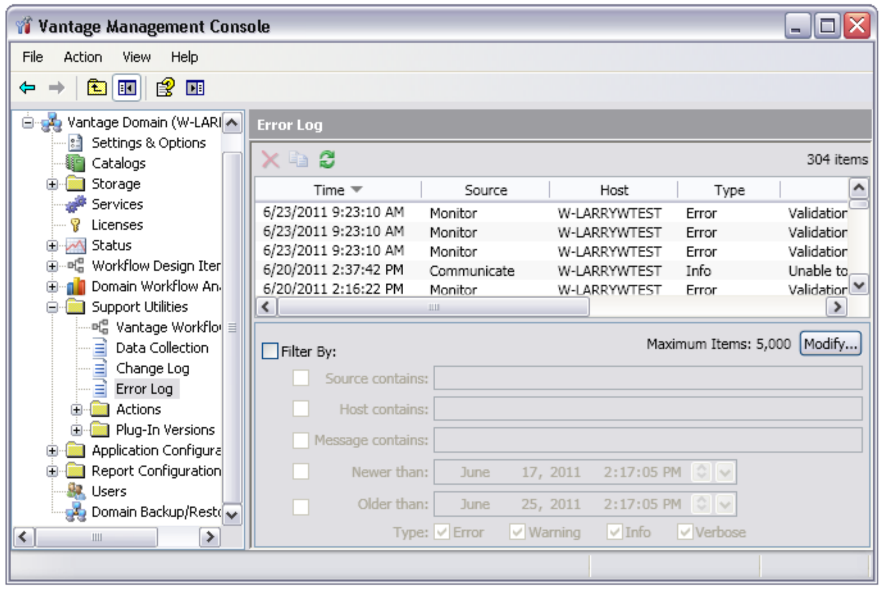
Filter. To filter the list, check Filter by, then check the field you want to filter and enter the value to filter it by.

Error Log

The Error Log utility Enables you to track errors that occur in the domain by time, source, and host.

Click the Error Log icon under the Support Utilities icon in the component panel to display its details panel:

Figure 43. The Error Log details panel.



Delete. Select one or more error log records, and click Delete to remove them from the database.

Copy. Select one or more error log records, and click Copy to place these records on the clipboard as text, so that they can be pasted into other applications - for example, a spreadsheet.

Refresh. Click to update the table from the database.

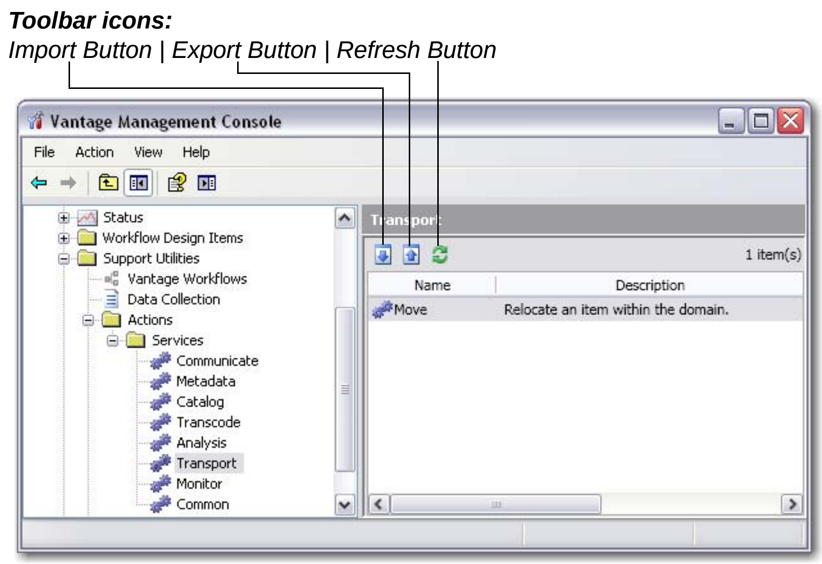
Filter. To filter the list, check Filter by, then check the field you want to filter and enter the value to filter it by.

Actions

Use the Actions import/export utility to import and export your actions, similar to the way you import and export workflows. Actions are saved as XML files - one action per file.

Click the Actions > By Service and then select a service, to display its details panel:

Figure 44. The Actions details panel.



Import. Click the Import icon in the toolbar to display a file system dialog, so you can select a previously exported action file. Navigate to the directory where the action XML file is stored. Select the file you want to import and click OK.

When you import an action into a domain, it is *not* associated with a workflow. Instead, the imported action displays in the appropriate actions template list in Workflow Designer. When you add this template to a workflow, it has all of the settings of the original action.

Note: *You can not import two action that are named the same - the file name is not the name of the action - the action name is stored in the XML file. Thus, you can't duplicate an exported action file and rename it, then import it under the new file name. The only way to solve the problem of two identically named actions you're attempting to import is to change the action name of the appropriate element inside the XML file, then re-import it.*

Export. Click Export to display a file system dialog, so you can select the server and directory where you want to save the action as an XML file. The file by default is named the same as the action name, but can be changed before saving it.

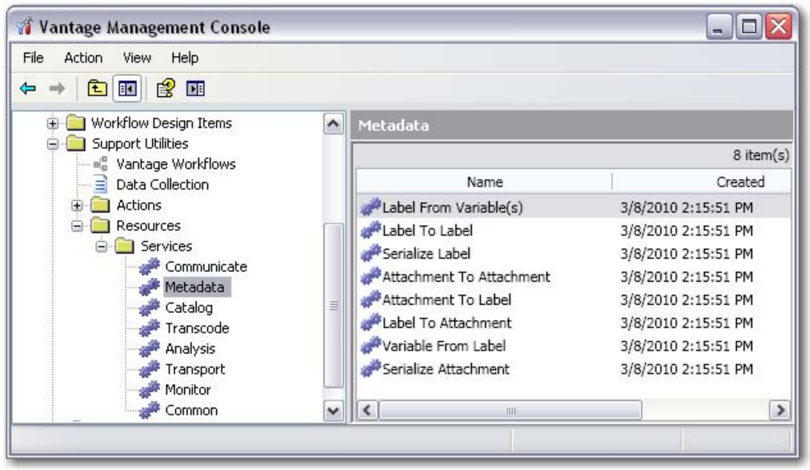
Note: *Changing the name of the XML file does not change the name of the action in the XML file.*

Plug-in Versions

Use the Plug-in Versions utility to display the components that are running in the domain, filtered by service.

Click the Plug-in Versions > By Service icon in the component panel and then click a given service to display its details panel:

Figure 45. The Resources > Services details panel.



The Resource component enables you to determine which components are installed for and determining their version number.

Application Configurations

Use Application Configurations to set up and configure client applications such as Job Status Views and Workflow Portal with the correct functionality for your workflows. These configurations are stored in the Vantage domain database providing selection and implementation when users start a client application.

Team Management

Job Status Views is a Web client application that provides non-administrators with a way of seeing jobs submitted into one or more Vantage workflows. It also provides administrators with the capability to deploy customized web status views to teams that need to see jobs in workflows without showing information about other workflows.

Note: *For a comprehensive overview of the Job Status Views Web application program, see the Job Status Views User's Guide.*

Workflow Portal is available for all products, and has a comprehensive, highly-configurable user interface for operators, which enables browsing catalog for media, submitting and forwarding jobs, adding metadata, and setting variable values. It is ideally suited for use by operators and other personnel in a wide variety of workflows in production environments.

Note: *For a comprehensive overview of Workflow Portal from a designer's perspective, and strategies for implementing a customized interface for various media processing applications, see* *Configuring Workflow Portal Applications.*

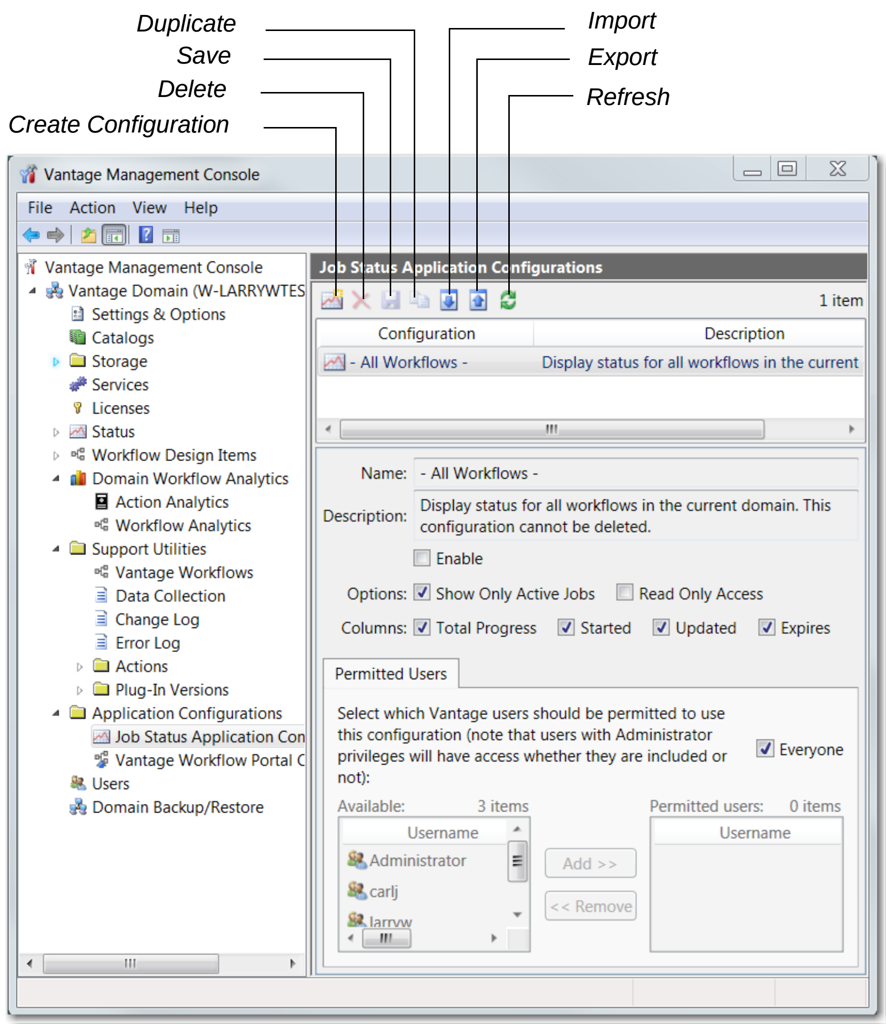
Vantage administrators must create and configure these configuration files so that users can access them when they launch Job Status Views or Workflow Portal to perform their tasks.

Job Status Views

Team Management

Job Status Views can be displayed in two different (but similar) ways. First, if the All Workflows (default) configuration is selected, all workflows are configured together, as a group. But if a new configuration is created, only the workflow selected is configured.

Figure 46. The Job Status Application Configuration Window.



Job Status configurations can be deleted, duplicated, imported, and exported by clicking the appropriate button at the Job Status Application Configuration window.

All Workflows Configuration

To configure all workflows for the Job Status Views, select All Workflows from the list of configurations. The Name and Description are already defined with default information.

Enable. Check the Enable checkbox to activate the Job Status Application configurations.

Options

Show Only Active Jobs. Check to cause only running jobs to be shown. When checked, jobs that are in any other state - completed, failed, stopped by user, etc. - do not show.

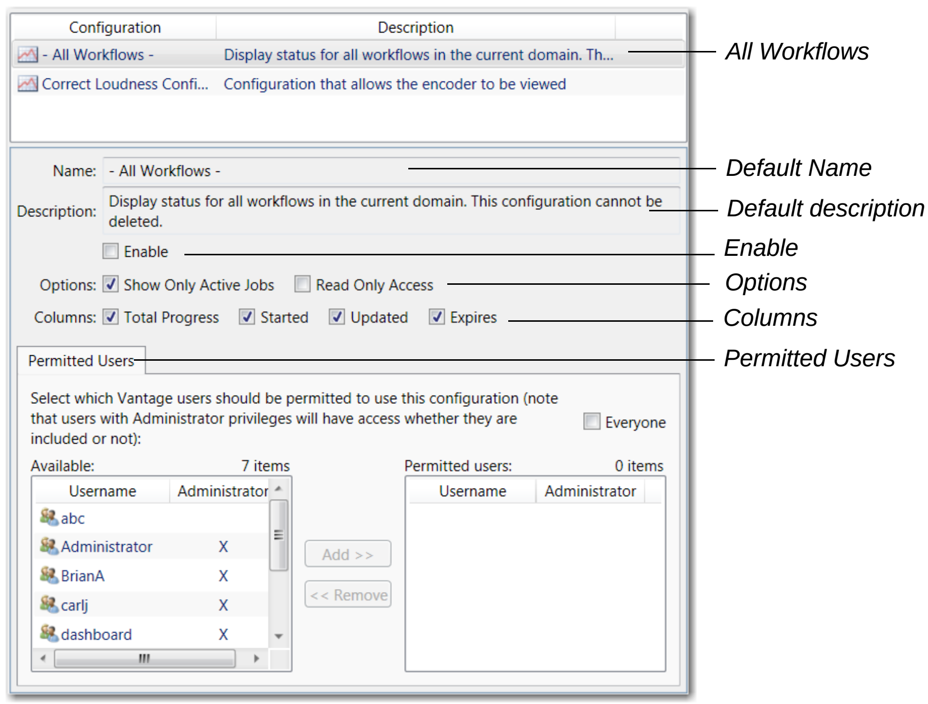
Read Only Access. Check the *Read Only Access* checkbox to prevent users from making changes to the Job Status.

Columns Check the checkboxes of columns to be displayed in the Job Status window: Total Progress, Started, Updated, and/or Expires.

Team Management

Permitted Users Sets up user permissions (see Permitted Users).

Figure 47. All Workflows Configuration



Single Workflow Configuration

To configure a single workflow for the Job Status Views, create a new configuration by clicking the Create Configuration icon in the toolbar. Select a workflow from the list of workflows displayed, and click OK.

Once a new Job Status view has been created, it must be configured. Configuration includes: assigning a name and description, selecting some options, choosing actions, and setting user permissions.

Name This displays the name of a Job Status Application configuration.

Description This displays a description for this configuration. The description is displayed in the Job Status application for benefit of the user.

Select Click the Select button to choose a workflow.

Options Check the *Show Only Active Jobs* checkbox to cause only the active jobs to be shown. Check the *Read Only Access* checkbox to prevent users from making changes to the Job Status.

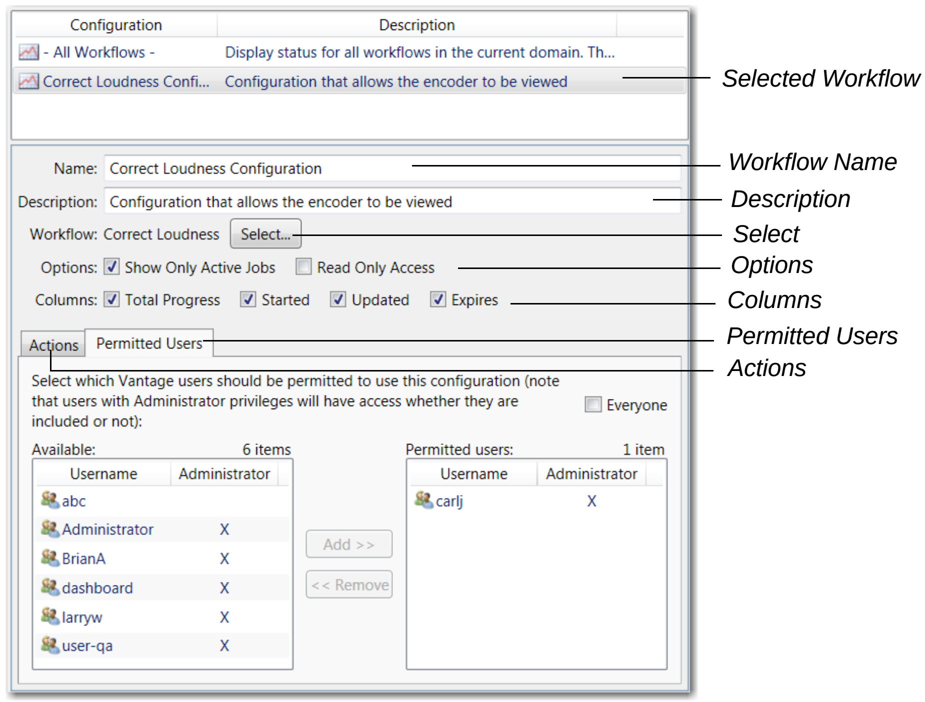
Columns Check the checkboxes of columns to be displayed in the Job Status window: Total Progress, Started, Updated, and/or Expires.

Team Management

Permitted Users Sets up user permissions (see Permitted Users).

Actions Sets up visibility of workflow actions. (see Actions).

Figure 48. Single Workflow Configuration



Configuration Tabs

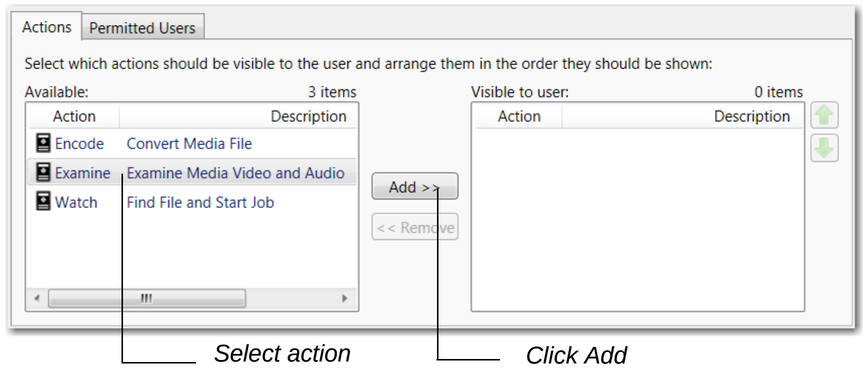
There are two configuration tabs: Actions and Permitted Users. The Actions tab is only available in Single Workflow Configuration. Both tabs apply to All Workflows Configuration.

Actions

Vantage workflow actions can be hidden or made visible to users.

Visible actions List. To add users to the visible actions list, select an action in the *Available* list and click the *Add* button. To remove an action, select an action in the Visible Actions list and click the *Remove* button.

Figure 49. Job Status Actions



Permitted Users

Team Management

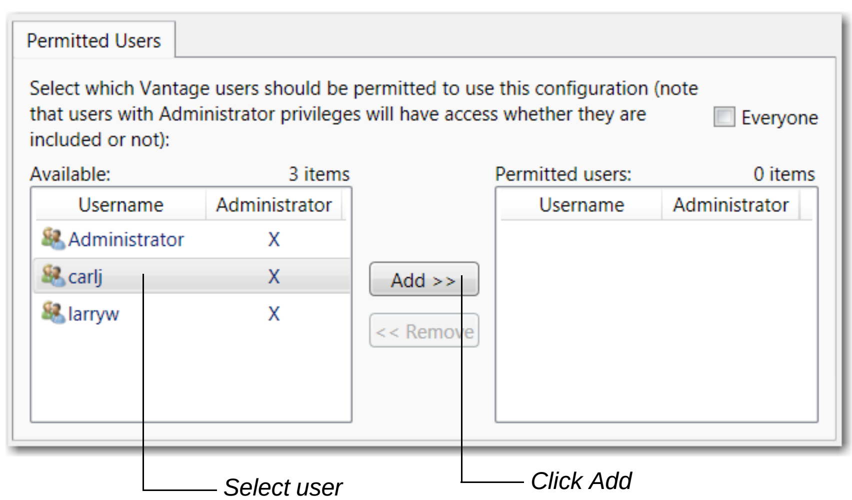
Vantage users can be selectively permitted to use the Job Status Application Configuration.

Note: *Users with administrative privileges will have full access whether or not they are given permission.*

Everyone. Check the *Everyone* checkbox to automatically permit all users to have access to the Job Status Application configuration. When unchecked, users are only permitted by including them in the *Permitted Users* list.

Permitted Users List. To add users to the permitted users list, select a user in the *Available* list and click the *Add* button. To remove a user, select a user in the *Permitted Users* list and click the *Remove* button.

Figure 50. Job Status Permitted Users



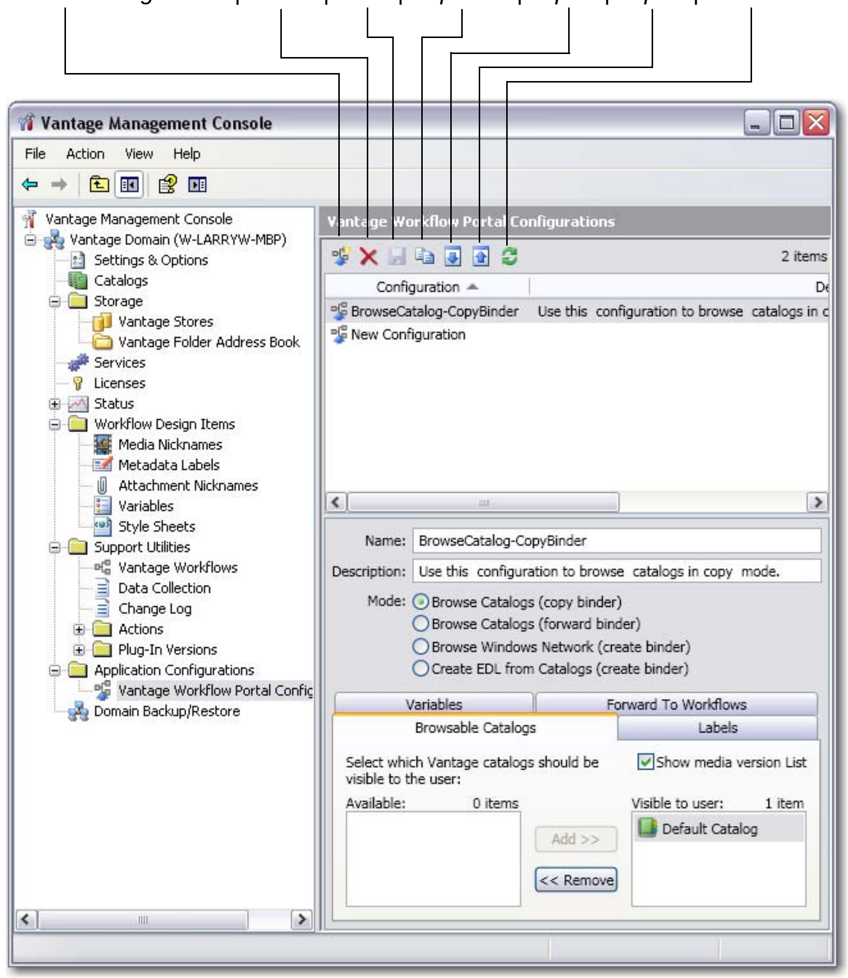
Workflow Portal

To create a new configuration for a Workflow Portal, click the Create Configuration icon in the toolbar. Name the configuration, select its mode, and configure it.

Note: *If you are creating a store to hold proxy files to be viewed in Vantage Workflow Portal, Telestream recommends that you reference the store with a UNC path. Some SAN clients do not allow frame-accurate representation of proxies when using shared drives.*

Figure 51. The Workflow Portal configuration panel.

Toolbar icons:
Create Configuration | Delete | Save | Duplicate | Import | Export | Refresh



Name. Enter a name for this configuration. Usually, you'll name a configuration by its functionality, or by the role or department that typically uses this type of functionality. The names of all configurations in the Domain database are displayed by Workflow Portal when it is launched by the user, so that they can select the configuration appropriate to the task at hand.

Description. Enter a practical description for this configuration. The description is displayed by Workflow Portal for benefit of the end user.

Mode. Select a mode for this configuration. The mode you choose limits the general operation of Workflow Portal. Each mode has a specific set of functions. Within each mode there are minor differences in functionality.

For details on when to use each mode, and how to configure it, follow these links:

Browse Catalogs Copy Binder Mode

Browse Catalogs Forward Binder Mode

Browse Windows Network Mode

Create EDL from Catalogs Mode

Configuration Details. In each tab, configure the settings to meet your operator requirements.

For details on how to configure each configuration tab, follow these links:

Configuring the Variables Tab

Configuring the Forward to Workflows Tab

Configuring the Browsable Catalogs Tab

Configuring the Labels Tab

When you're done, click Save to update this configuration in the domain database.

Browse Catalogs Copy Binder Mode

You should create and set up a Browse Catalogs Copy Binder mode configuration when you want operators to browse and select a catalog binder as the content to submit to a workflow.

The difference between Copy Binder and Forward Binder mode is that Copy Binder mode makes a copy and submits the copy; the original is not modified, either by Workflow Portal or the workflow the content is submitted to. For this reason, the metadata labels are read-only.

In Forward Binder mode, changes made in Workflow Portal (such as edits to the metadata labels) and changes made by the workflow submitted to (such as adding an additional media version to the binder) affect the original binder in the catalog.

Configuration Details. In each tab, configure the settings to meet your operator requirements.

For details on how to configure each configuration tab, follow these links:

Configuring the Variables Tab

Configuring the Forward to Workflows Tab

Configuring the Browsable Catalogs Tab

Configuring the Labels Tab

Browse Catalogs Forward Binder Mode

You should create and set up a Browse Catalogs Forward Binder mode configuration when you want operators to browse and select a catalog binder as the content to submit to a workflow.

The difference between Copy Binder and Forward Binder mode is that Copy Binder mode makes a copy and submits the copy; the original is not modified, either by Workflow Portal or the workflow the content is submitted to. For this reason, the metadata labels are read-only.

In Forward Binder mode, changes made in Workflow Portal (such as edits to the metadata labels) and changes made by the workflow submitted to (such as adding an additional media version to the binder) affect the original binder in the catalog.

Configuration Details. In each tab, configure the settings to meet your operator requirements.

For details on how to configure each configuration tab, follow these links:

Configuring the Variables Tab

Configuring the Forward to Workflows Tab

Configuring the Browsable Catalogs Tab

Configuring the Labels Tab

Browse Windows Network Mode

You should create and set up a Browse Windows Network mode configuration when you want operators to select a media file (or files) from a server and directory on the Windows network and submit them to a workflow, in much the same manner as when manually submitting a job in Workflow Portal.

Configuration Details. In each tab, configure the settings to meet your operator requirements.

For details on how to configure each configuration tab, follow these links:

Configuring the Variables Tab

Configuring the Forward to Workflows Tab

Configuring the Browsable Catalogs Tab

Configuring the Labels Tab

Create EDL from Catalogs Mode

You should create and set up a Create EDL from Catalog mode configuration when you want operators to create an EDL (edit decision list) using the content from the specified catalogs, and submit it to a workflow. The user can specify mark in and mark out points for each clip so that only the specified portion of the clip is used. (All clips in an EDL must have the same frame width & height, frame rate, and sample rate.)

This mode is highly specialized, and requires that each binder being submitted contains specific media versions for use in this context - Vantage EDL, Vantage Proxy, and Vantage Thumbnail. Typically, these files are produced by a workflow (and registered in the catalog) designed with that intent.

Configuration Details. In each tab, configure the settings to meet your operator requirements.

For details on how to configure each configuration tab, follow these links:

Configuring the Variables Tab

Configuring the Forward to Workflows Tab

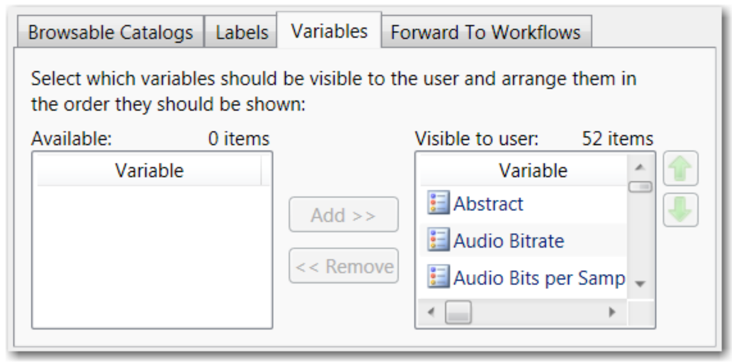
Configuring the Browsable Catalogs Tab

Configuring the Labels Tab

Configuring the Variables Tab

Use the Variables tab to select the variables you want to display in Workflow Portal, for use in workflows.

Figure 52. The Variables tab.



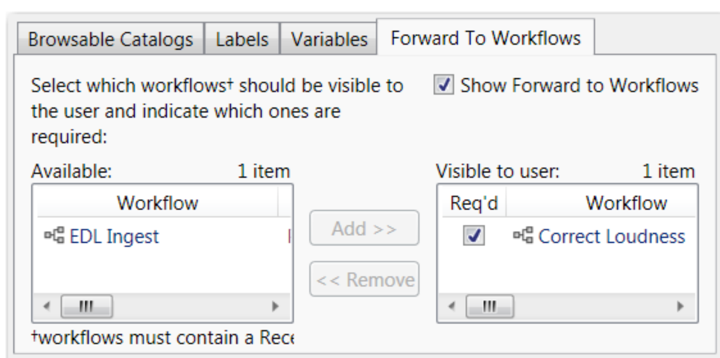
Adding and Removing Variables

To add a variable to Workflow Portal, select it in the Available column on the left, and click Add to display it in the Visible column. To remove a variable from Workflow Portal, select it in the Visible column and click Remove to display it back in the Available column.

Configuring the Forward to Workflows Tab

Use the Forward to Workflows tab to select the workflows you want to display in Workflow Portal. Workflows that are intended for use in forwarding must have a Receive action as their first action. Uncheck the *Show Forward To Workflows* checkbox to disable viewing in the Workflow Portal application.

Figure 53. The Forward to Workflows panel.



Adding and Removing Workflows

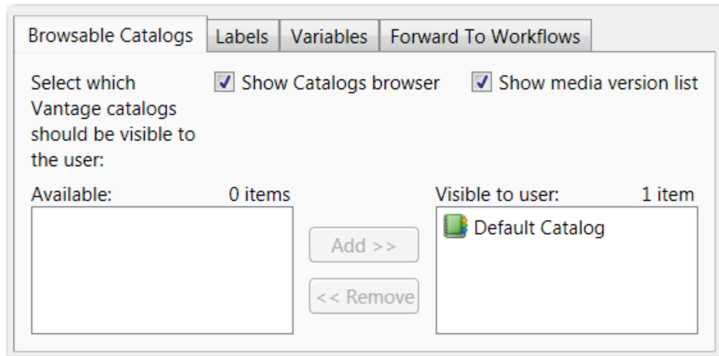
To add a workflow to Workflow Portal, select it in the Available column on the left, and click Add to display it in the Visible column. To remove a workflows from Workflow Portal, select it in the Visible column and click Remove to display it back in the Available column.

Configuring the Browsable Catalogs Tab

Use the Browsable Catalogs tab to select the catalogs you want to display in Workflow Portal. Uncheck the *Show Catalog Browser* or *Show Media Version List* checkbox to disable viewing of either in the Workflow Portal application.

Note: *The Browsable Catalogs feature is not applicable in Browse Windows Network mode, so this tab is not displayed.*

Figure 54. The Browsable Catalogs tab.



Adding and Removing Browsable Catalogs

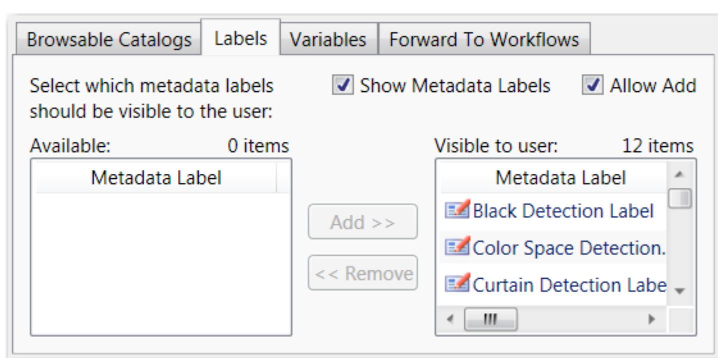
To add a Browsable Catalog to Workflow Portal, select it in the Available column on the left, and click Add to display it in the Visible column. To remove a Browsable Catalog from Workflow Portal, select it in the Visible column and click Remove to display it back in the Available column.

If you want to display all of the media in a given catalog in Workflow Portal, select the catalog in the Visible column, and check Show media version list.

Configuring the Labels Tab

Use the Browsable Catalogs tab to select the catalogs you want to display in Workflow Portal. Uncheck the Show Metadata Labels checkbox to disable viewing in the Workflow Portal application.

Figure 55. The Labels tab.



Adding and Removing Labels

To add a label to Workflow Portal, select it in the Available column on the left, and click Add to display it in the Visible column. To remove a label from Workflow Portal, select it in the Visible column and click Remove to display it back in the Available column.

Allow Add. If you want to allow the user to add new metadata labels manually in Workflow Portal, check Allow Add. When Allow Add is checked, the Add Metadata Labels toolbar button and context menu item in the label editors.

When unchecked the only labels that can be used are the pre-existing set you choose.

Delete Binder (Browse Catalogs Forward Binder Mode only). If you want to allow the user to delete the selected binder in certain catalogs in Workflow Portal, select the catalog in the Visible column, and check Delete Binder.

Deleting a Configuration

Click the Delete icon to permanently remove the selected configuration from the domain database.

Duplicating a Configuration

Click the Duplicate icon to create a new configuration from the currently selected configuration. Make the necessary changes, and click Save to save it in the domain database.

Saving a Configuration

Click the Save icon in the toolbar to update the domain database with changes you've made to this configuration.

Importing and Exporting Configurations

Importing Configurations. Click the Save icon in the toolbar to display a file system dialog, so you can select a configuration file that was previously exported. Navigate to the directory where the Configuration XML file is stored. Select the file or files you want to import and click OK.

Note: *You can not import two configurations that are named the same - the file name is not the name of the configuration - the configuration name is stored in the XML file. Thus, you can't duplicate an exported configuration file and rename it, then import it under the new file name.*

Exporting Configurations. Click Export to display a file system dialog, so you can select the server and directory where you want to save each of the selected configurations as an XML file. The file by default is named the same as the configuration name, but can be changed before saving it.

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

REPORT CONFIGURATIONS

Master Control

When using Master Control, the Vantage Management Console provides a way to generate reports and configure them to display only the information needed.

Job Reports

Use the Job Reports configurator to create new job report, edit or make changes, or delete a job report when obsolete.

To create a new report template, click the Create icon. To edit an existing report, select it in the list of job reports.

Create Click the Create icon to create a new job report. Job reports can also be created in the Workflow Designer.

Delete Click the Delete icon to delete a job report. A warning about the job report is displayed to prevent accidental removal.

Save Click the Save icon to save changes made to the job report configuration. If changes are not saved, you will be promoted to save upon leaving that job report configuration.

Duplicate Click the Duplicate icon to duplicate a selected job report. All configuration settings in the job report are duplicated.

Import Click the Import icon to display a file system dialog to select a job report file. Navigate to the directory where the job report XML file is stored, select the file (or files) you want to import, then click OK.

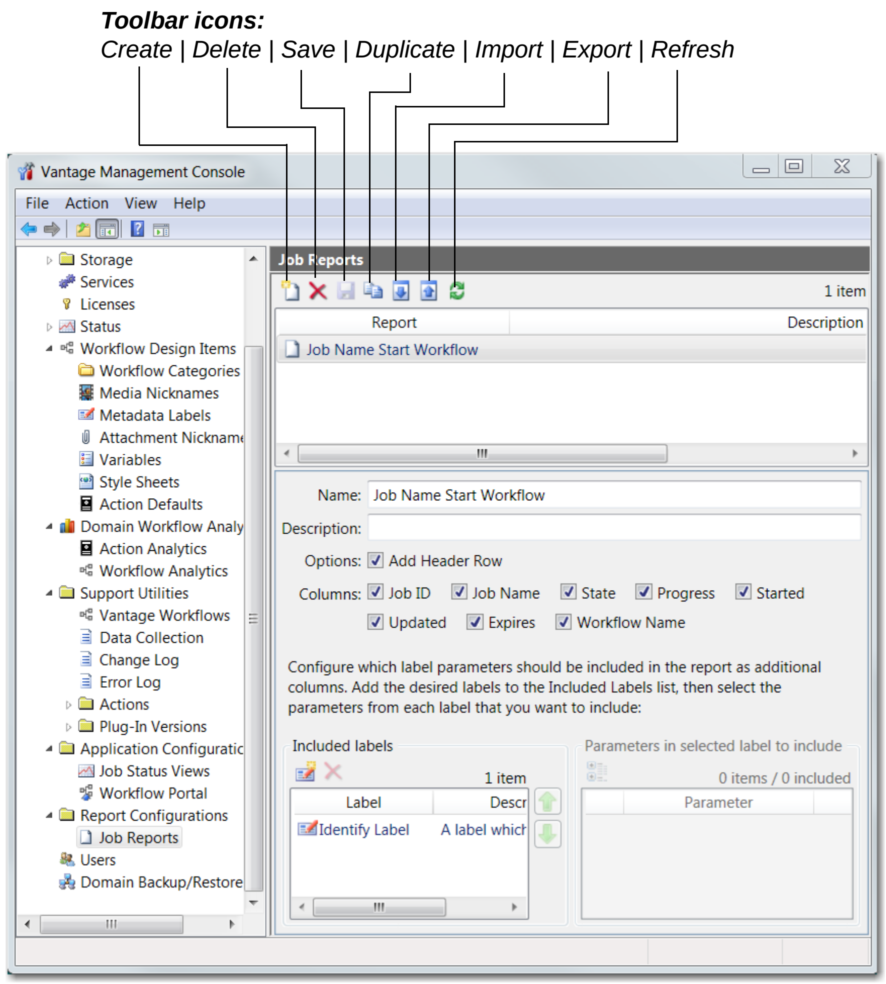
Note: *You can not import two job reports that are named the same - the file name is not the name of the job report - the job report name is stored in the XML file. Thus, you can't duplicate an exported job report file and rename it, then import it under the new file name.*

Export Click the Export icon to display a file system dialog to select the directory where you want to save the selected job report as an XML file. The file by default is named the same as the job report name, but can be changed before saving it.

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

Refresh Click the Refresh icon to update the list of job reports.

Figure 56. Job Report Panel



Use the following controls to configure a job report:

Name. Enter a unique name for this report. Report names display in the Report list.

Description. Optionally, enter a description of this report.

Options. Check Add Header row to include a header row with the column identifiers you've selected, in the CSV file.

Columns. Check the columns for which you want data values for the selected jobs included.

Included Labels. Select labels from which you want to include parameters in the CSV file.

Parameters. Select parameters you want to include in the CSV file.

User Management

Team Management

When using Team Management, Vantage users are required to log in using a Vantage user - a username and password assigned to them by the Vantage system administrator who is given the authority to create, remove, and edit user profiles. Users, however, are allowed to change their own password.

User management is implemented in the Management Console.

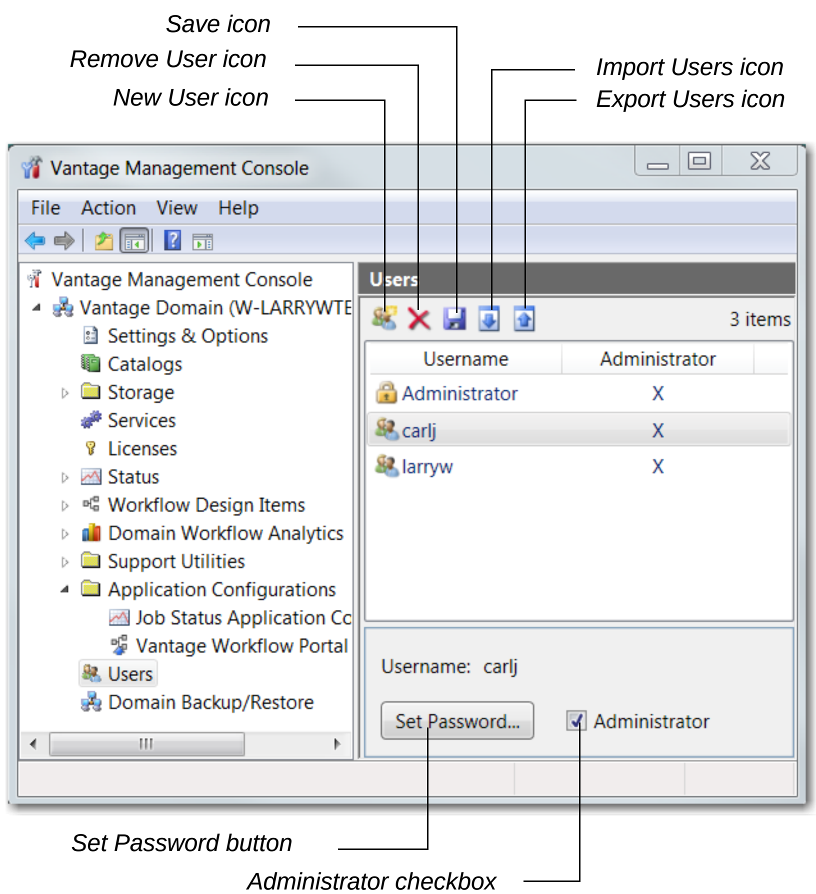
This user management system enables the administrator to control which users have access to the Web Job Status view, the Workflow Portal, and to workflow categories in the Workflow Designer.

Adding Users

To add a new user, click the *New User* icon at the top of the User Management Panel. When the dialog box displays, enter the username and password (and confirm the password) of the new user. If the new user is to have administrator privileges, check the *Administrator* checkbox.

Click *OK* to close the dialog box, then click the *Save* icon to save your changes.

Figure 57. User Management Panel



Users can also be given or denied administrator privileges by checking (or unchecking) the Administrator checkbox located at the bottom of the User Management panel. The target user must be selected when this action is taken. After checking or unchecking the *Administrator* checkbox, click on the Users list to prompt a dialog box to confirm this change.

Setting Passwords

To set the password of a user, click the Set Password button. When the dialog box displays, enter the password (and confirm the password) of the user. Click *OK* to close the dialog box, then click the *Save* icon to save your changes.

Removing Users

Users can be removed by selecting the user in the Users list and clicking the Delete User(s) icon at the top of the User Management panel. When requesting the removal of a user, a dialog box will display asking you to confirm this action. You cannot undo the removal of a user, thus to restore a user you must add him again as a new user.

Importing and Exporting Users

User lists can be imported and exported. To import a list of users, click the Import Users icon, navigate to the XML file containing a list of users, and click the Open button. To export a list of users, click the Export Users icon, enter an XML filename for the list of users, and click the Save button.

DOMAIN BACKUP/RESTORE

Use Domain Backup/Restore to save archival copies of the Vantage database in a separate file, and to replace your current domain database with the contents of a previously-saved archive.

It is important to understand that the Vantage database contains all workflows, all services, and all jobs registered to the domain. In particular, the services identified in the domain are those registered upon installation, plus changes you have made after installing (or removing) other services.

Caution

Restoring a Vantage domain should be performed on the same machine it was backed up from - or if to another machine, the services defined in the database must match the services installed. Alternatively, you can remove all licenses and workflows from the domain if you are moving it to another computer. Restoring a domain does not install (or recreate the actual domain - only its definition).

For example: you back up a domain, then operate it for several hours, make changes to a few workflows (or add new ones), and add or remove some services after installing them or uninstalling them.

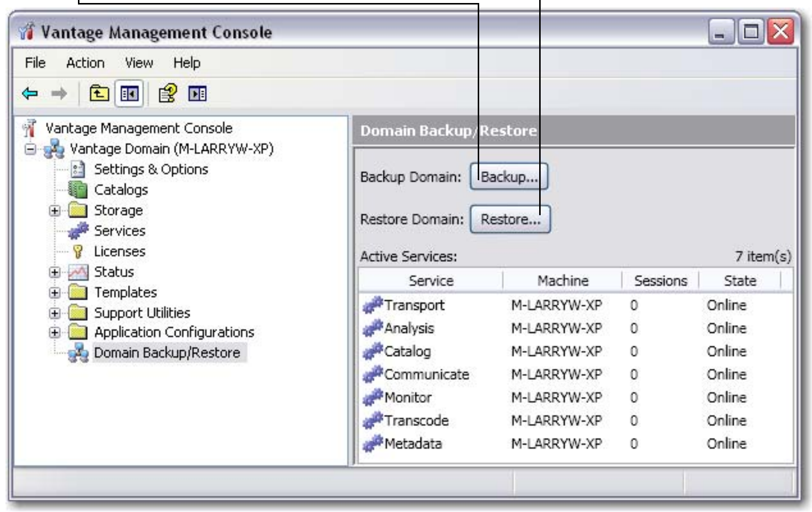
Next, you restore the domain using the backup from a few hours ago. Now, you have the domain as it existed when the backup was created - intervening job records are lost, workflows you added or changed are gone, and the registered services do not reflect the actual services you may have installed or uninstalled.

Using Backup and Restore Utilities

Click the Domain Backup/Restore icon in the component panel to display its details panel:

Figure 58. Domain Backup/Restore panel.

Backup | Restore buttons:
Backup Button | Restore Button



The Active Services table enables you to determine that all services are acquiesced prior to performing a backup or a restore of the Vantage database. If you perform a backup while services are executing workflow tasks, although all records will have integrity (be complete), some job records may be lost.

Likewise, before restoring a Vantage database, review the Active Services table to determine that all sessions display 0, indicating no jobs are being processed. When you restore a system, all services are stopped, the current database contents are irretrievably destroyed and the archive database is restored, and the services are restarted with the Vantage database repopulated with the backup database values.

Be certain to back up the current database prior to restoring the database from a previous backup, so that in case of failure, you can reload the current database.

Backup. Click Backup to display a file system dialog, so you can create a SQL backup file. Navigate to the directory where you want to save the backup file, name it (for example, *Vantage_12_07_09.bak*) and click Save to back up your Vantage database and save it in the specified folder.

Restore. Click Restore to display a file system dialog, so you can select a SQL backup file you created earlier and restore your Vantage database. Navigate to the directory where you saved the backup file and select it. Click Open to restore your Vantage database with the information in your backup (archive) file.

Caution

Always back up your current database before restoring it to an earlier backup. Restoring your Vantage database overwrites the entire contents of the current database with the contents of the backup file selected.

USING THE HELP SYSTEM

The Vantage Online Help system consists of two panels: The left panel has three selection tabs and the right panel is the topic display area.

The three tabs are:

- The Contents tab displays a hierarchically organized set of chapters and pages. This list provides a wide range of overview and how-to topics that explain how to add, configure, and manage Vantage components.
- The Search tab enables you to look for specific words or phrases. The Online Help System displays a list of topics that match your search criteria.
- The Favorites tab provides a list of user selected topics. Click the Add button to add the current topic to the favorites list. Click Remove to remove a selected topic and click Display to display the topic in the panel on the right side of the help window.

CHAPTER 3

Configuring Workflow Portal Applications

Use this chapter to learn about Workflow Portal, and how to set up and configure Workflow Portal for operator use.

Topics

Introduction

Workflow Portal is a Windows program designed to allow operator interaction as part of a Vantage workflow. Workflow Portal is highly configurable, allowing administrators to quickly create and deploy operator-facing tasks within minutes – submitting and forwarding jobs: browsing catalogs for media, adding/editing metadata, setting variable values, etc.

Workflow Portal displays a specific user interface and perform functions based on which configuration is selected when the operator launches Workflow Portal.

Note: *One license is required for every operator using Workflow Portal at the same time.*

Setting up Vantage Workflow Portal

To configure Workflow Portal for a given application, an administrator will:

1. Use the Management Console (Application Configurations > Workflow Portal) to design a Workflow Portal configuration and save it in the Vantage domain. This configuration is stored in the Vantage database, and typically includes:

- Which configuration templates the operator can utilize
- Which workflows the operator can use
- Which asset catalogs are visible to the operator
- Which metadata labels and variables the operator can review/add
- Which workflows the operator can forward to.

2. Create workflow sets (in Workflow Designer) to support the Workflow Portal configuration. The first workflow is the ingest workflow; the second is the target workflow which encodes the media a delivers it to a deployment target:

Ingest Workflows

- Prepare a proxy, thumbnail, and if necessary an MPEG-2 media version of incoming assets, and add them to the binder
- Add metadata labels to the binder
- Register the binder in a catalog so that operators can view it.

Target Workflows

Target workflows process binders which are forwarded to them by operators. They may perform one or more of the following tasks:

- Consume metadata provided by operators
- Use that metadata to make decisions about what to do
- Transcode or rewrap incoming media – including EDL submissions from operators
- Perform other operator-driven tasks as desired by the administrator.

3. Deploy Workflow Portal for each operator.

- Install the Workflow Portal program on the operator's computer
- Launch Workflow Portal for the first time, to pre-select the Vantage Domain and optionally, the Portal configuration
- Ensure that a sufficient number of Workflow Portal licenses are available for operators using Workflow Portal.

The following sections provide detailed instructions and examples for each of these steps.

How Workflow Portal Works

Workflow Portal is a Windows program that is installed and runs directly on an operator's computer. It is a Vantage client program, and connects directly to the Vantage database. With this connection it:

1. Determines which Workflow Portal configurations it can use
2. Once a configuration is selected, the program determines:

   – How the user interface should appear to the operator
   – Which metadata labels to make available for editing/review
   – Which assets the operator should be allowed to access
   – Which workflows the operator can submit to

In its simplest form, Workflow Portal is a *submission* tool which allows operators to take assets from one workflow and submit them to other workflows. However, Vantage Workflows are very data-driven, which means that administrators have a great deal of power to:

- Automatically analyze and assemble information for operators to view and use in Workflow Portal
- Design meaningful metadata templates that operators can fill in
- Design data-driven workflows that respond dynamically to the metadata

This flexibility allows administrators to present a wide variety of operator tasks in Workflow Portal, such as:

- Review and approval of assets prior to production
- Entry and review of metadata for multi-channel distribution
- Asset forwarding with choice of distribution channels – or audience targets
- Extraction of sub-clips from a primary asset
- Assembly (stitching) of multiple assets into a single output file
- Automated tag & bag editing for promo and highlights production

… and other tasks as designed by the administrator.

SETTING UP A WORKFLOW PORTAL CONFIGURATION

Workflow Portal configurations are created in the Management Console (select Vantage Domain > Application Configurations > Vantage Workflow Portal Configurations).

Here you can create, import, export, delete and manage configurations for use by your operators.

Note: *If you are creating a store to hold proxy files viewed in the Vantage Workflow Portal, Telestream recommends that you reference the store with a UNC path. Some SAN clients do not allow frame-accurate representation of proxies when using shared drives.*

Creating and configuring a Workflow Portal involves selecting the proper template type based on your application, creating the workflows you need, and configuring and testing the workflow template to support the application.

Choosing a Configuration Template

Workflow Portal supports four types of configuration templates. Administrators should select one of the four templates, then customize if for a specific application.

Each template is described here with details about both ingest and target workflow considerations.

Browse Catalogs (Copy Binder)

This configuration template enables an operator to browse the selected Vantage catalog for binders. They can then select one binder, and submit it to one or more workflows. When the submission occurs, the original binder is copied, and the copy is submitted to the workflow – the original binder remains in the catalog and remains unchanged.

Note: *A binder contains metadata labels, and references to media files and attachments. When a binder is copied, the metadata labels are also copied and thus may be different than the original. Any media files or attachments that exist in the original binder are not copied, and are referenced by both the original and the new copy.*

The Browse Catalogs configuration template is ideal when:

1. You wish the original binder to remain in the catalog
2. You do not want to change the original binder's metadata
3. The original media files are not affected by the target workflow, and
4. You want operators to be able to submit the same asset multiple times.

Ingest Workflow Considerations

In order for assets to appear in a Vantage Catalog, they must be registered as part of an ingest workflow. A thumbnail should also be added to the binder and given the nickname *Vantage Thumbnail*; a Windows Media proxy can also be added and given the nickname *Vantage Proxy*.

Target Workflow Considerations

The target workflow should include a Receive action. Remember that any media files or attachments present in the original binder will also be referenced in the copy. As a result, the target workflow should not delete any of those original files; the original binder would then have missing files.

Example Workflows

- Operator marks an in point, and an out point for a highlight; multiple highlights can be extracted from the same input.
- Operator marks trim points around a promo from a captured satellite feed, and marks a branding entry point on the timeline; the target workflow then trims the promo and applies graphics for multiple distribution channels.

Browse Catalogs (Forward Binder)

This configuration template enables an operator to browse the selected Vantage catalog for binders. They can select a binder, and either edit its metadata, or submit it to one or more workflows. When the submission occurs, the original binder is forwarded to the workflow (and optionally removed from the catalog, if configured that way by the administrator).

Note: *Because the binder is directly affected by the target workflow, if the binder remains in the catalog, any changes to the binder will appear in the catalog as the workflow runs.*

The Browse Catalogs (Forward Binder) configuration template is ideal when:

1. You wish to use the catalog as a task list for the operator, automatically removing binders from the catalog when they are forwarded
2. You wish the workflows to update binders that remain in-place in the catalog, or
3. You wish operators to edit metadata in-place.

Ingest Workflow Considerations

In order for assets to appear in a Vantage Catalog, they must be registered as part of an ingest workflow. A thumbnail should also be added to the binder and given the nickname *Vantage Thumbnail*; a Windows Media proxy can also be added and given the nickname *Vantage Proxy*.

Target Workflow Considerations

The target workflow should include a Receive action. Remember that if the binder is not removed from the catalog, any changes made during the target workflow will be apparent in the catalog.

Example Workflows

- Operator reviews an asset, marks it as approved/rejected, and forwards to a workflow that responds to that metadata. The asset is removed from the catalog.
- An ingest workflow detects quality issues and places an asset in a catalog for review. An operator review the asset, using a proxy to review the video at error timecodes published by the ingest workflow. If the asset is unacceptable, the operator forwards to a workflow for

quarantine; otherwise the operator forwards to the appropriate next step for the asset.

- Operator edits asset metadata in-place in the catalog. When the asset is ready for distribution, the operator chooses distribution channels and forwards to the target workflow. The target workflow responds to the operator choices and forwards for distribution.
- Operator reviews black segments detected by Vantage, and confirms black removal points. The target workflow uses those timecode parameters to remove black from the original media.

Browse Windows Network (create binder)

This configuration template enables an operator to browse the Windows network for media files. Multiple files can be submitted simultaneously; each one will have its own job (and its own binder) created. Upon submission, the operator can add metadata labels (as specified by the administrator); in the case of a batch submission with multiple media files, each media file will have a copy of the same metadata label placed in its binder.

The Browse Windows Network (create binder) configuration template is ideal when:

1. You want operators to submit multiple files to a workflow, and
2. You want operators to submit a file to a workflow, and enter metadata that will be used by the target workflow, without using a hot folder.

Ingest Workflow Considerations

Media files are submitted directly, so there is no ingest workflow. However, operators should ensure that any media files submitted are in locations that are visible to the Vantage Workflow. For example, files on a local drive (for example, *C:\media\myvideo.mpg*) is not visible to a remote Vantage server.

Target Workflow Considerations

The target workflow should include a Receive action. Each media file is assigned the nickname *Original* when it is submitted and results in a unique job being submitted.

Example Workflows

- Operator batch-submits a dozen files for Web distribution, and marks which distribution channels should be chosen as part of a metadata label. The target workflow uses that information to dynamically update metadata fields and redirect media to the appropriate target distribution channels.

Create EDLs from Catalogs (create binder)

This configuration template enables an operator to create an EDL (edit decision list) that stitches multiple assets in the catalog together. When the operator has created this list, a .tsedl file describing that list is generated and submitted to the target workflow.

Ingest Workflow Considerations

In order for assets to appear in a Vantage catalog, they must be registered as part of an ingest workflow. A thumbnail should also be added to the binder and given the nickname *Vantage Thumbnail*; a Windows Media proxy can also be added and given the nickname *Vantage Proxy*.

EDL processing requires Program Stream or Transport Stream MPEG-2 video, such a file should be provided in the binder with the nickname *Vantage EDL*. Vantage provides support for MXF DV, IMX, and XDCAM HD video formats as well.

Note: *All assets in the EDL list must have the same frame size and frame rate; operators will not be allowed to combine mixed media.*

Target Workflow Considerations

The target workflow should include a Receive action. It will receive a .tsedl file with the nickname *Original* and can then transcode - or direct convert - this list into an output file (or multiple output files).

Note: *If an MPEG-2 output file is created, a Direct Convert mode can be used to avoid a full transcode. Any timeline cuts that break GOP structures is replaced with I-Frame material, otherwise original GOPs will be preserved. If the output file is not MPEG-2, a full transcode can be performed. In either case, the VANC, captions, and audio will be correctly stitched during the processing of the EDL.*

Example Workflows

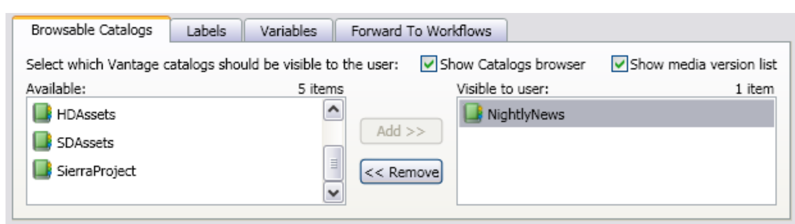
- Operator creates a list of syndication segments that are stitched together into a single program
- Operator selects a bumper, a clip, and a trailer, enters metadata, chooses distribution channels, and submits the package for distribution. The target Vantage workflow uses distribution channel choices and metadata to generate the correct formats and deploy to the chosen distribution channels.

Choosing Asset Catalogs

Operators will be able to see all binders in the selected catalogs. If the *Show media version list* option is selected, then the operators will also be able to see the individual media files in the catalog and review them independently.

Administrator can also choose for users *not* to see the catalog(s). To prevent users from seeing catalogs, uncheck Show Catalogs browser.

Figure 59. Selecting which catalogs to display to the user.



This is particularly useful if only one catalog is being used, because the Catalogs view has no value in this situation.

The design and choice of catalogs has an impact on how easily operators can perform their tasks.

For example:

- In Forward mode, bear in mind that the template can be configured to remove the binder from the catalog when it is forwarded. When using this template, the catalog may be considered a task list for operators to work from;

- In Copy mode, the binders are not removed from the catalog by the operators. As a result, you may wish to set appropriate expiration times on the catalogs;
- In all cases, you can use folders to structure how operators see assets. For example, bumpers assets may be kept in a *Bumpers* folder, separate from Primary Assets, in a *Primary Assets* folder.
- You may have multiple ingest workflows all providing binders to a target catalog.

DESIGNING METADATA LABELS AND VARIABLES

Vantage workflows are very data-driven, which means that the design of the operator-facing metadata offers an administrator a great deal of power and flexibility in crafting custom applications.

Operator Visualization

Labels can be designed in the Management Console (Workflow Design Items > Metadata Labels). When using Workflow Portal, the Preview/Test window can be used to visualize what an operator will see. Some considerations:

- Categories may be used to group logically related parameters.

Note: *That operators can turn off category view and simply view parameters as a flat list.*

- Parameters are listed as desired by the operator - you can order them exactly the way you want them to display in Workflow Portal.
- For text fields, a drop-down list may be created to reduce the chance of data entry errors. For example, a Ratings parameter may be limited to the terms *G, PG, PG-1, TV-14*, and *R*.

Metadata Driving Workflow Design

The target workflow can make great use of the metadata provided in a label. Using the Populate command, individual parameters can be extracted from labels into variables; they can then be used for decision-making, mathematical functions, or used to bind data - populating media or XML metadata, or dynamically generating encoding profiles.

Examples of how workflows can be designed to use a metadata label:

- Operators choosing distribution channels: A checkbox in a metadata label can determine whether an entire branch of a workflow should run. This is particularly useful to allow operators to choose distribution channels: The operator is presented with a list of check boxes, the target workflow contains one branch per checkbox, and dynamically chooses which branches should execute based upon the contents of the label.
- Trim and Keyframe Timecodes: Timecode parameters can be converted to variables, which can then be bound to the Trim filter during a transcode, or to the Time parameter when generating a JPEG keyframe. This allows an operator to specify the start/end point of a trim, and mark where a thumbnail should be generated.
- Media Metadata: Using XSL stylesheets, metadata labels can be converted into XML, CSV, or TXT files. Further, metadata label parameters can be converted to variables, which can then be bound to metadata encode parameters - injecting metadata directly into the output media file. (As one example, the Windows Media Encoder presents bindable parameters for Summary, Title, etc.; a workflow can be designed to feed these parameters directly from a metadata label).

- Graphics Insertion: Using a GraphicsFactory template, timecode and text parameters can be directly fed into GraphicsFactory variables. Also, timecodes can be used to determine where QuickTime interstitials should be inserted - allowing commercial insertion into media based upon operator-specified timecodes.

Ingest Workflow Metadata

When browsing a Vantage catalog, operators can also review metadata present in the binder. Some of this metadata may be useful - for example, a label that includes timecodes for detected black points on the timeline, or the timecode of the frame with the most macroblocking, will allow the operator to jump directly to those timecodes within the proxy view.

VANTAGE WORKFLOW PORTAL TOURS

This section contains examples of how to set up portals allowing operators to perform certain tasks. These tours assume that you are familiar with Vantage; they provide high-level design guidelines only.

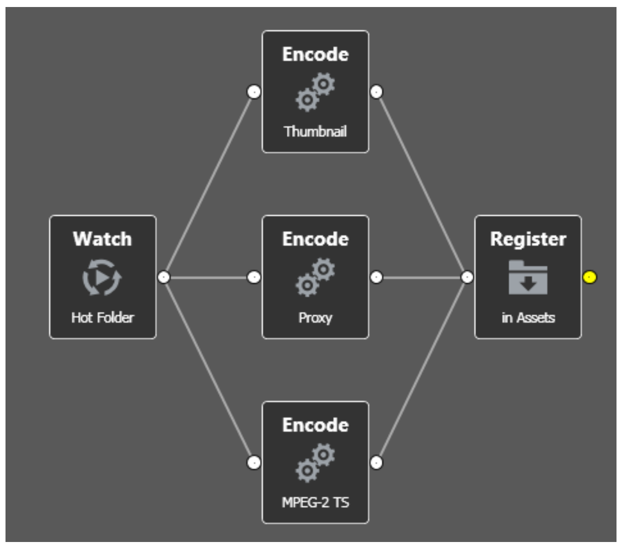
Workflow Portal Tour: Operators Submit an EDL

This tour describes how to configure the ingest workflow, target workflow, and Portal configuration, to allow operators to stitch assets together by specifying an EDL, and create an MPEG-2 Transport Stream output file.

Step 1: The Ingest Workflow

This workflow watches a hot folder for incoming media files.

Figure 60. Typical EDL ingest workflow.



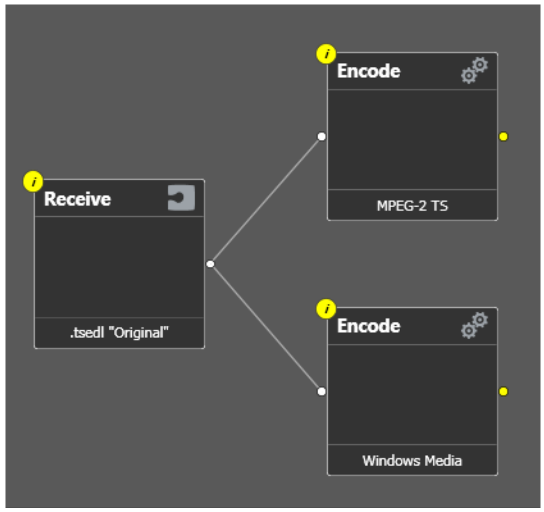
When new files are detected, the workflow will:

1. Generate a Windows Media proxy at 29.97fps, with the nickname *Vantage Proxy*
2. Generate a JPEG thumbnail at 5 seconds, with the nickname *Vantage Thumbnail*
3. Create a Transport Stream MPEG-2 file to be used for stitching, with the nickname *Vantage EDL*
4. Register the binder in the catalog named *Assets*

Step 2: The Target Workflow

The desired output format is MPEG-2 Transport Stream. Because the EDL inputs are also MPEG-2 Transport Stream, the Direct Convert container type is implemented.

Figure 61. Typical EDL processing workflow.



Video from the input files is re-wrapped without transcoding, and I-Frames will be inserted at any GOP breaks.

This workflow:

1. Receives from the Portal, and expects the .tsedl with the nickname *Original*
2. Uses the .tsedl file to stitch MPEG-2 from the source assets using *Direct Convert* to MPEG-2 Transport Stream
3. Uses the .tsedl file to transcode a Windows Media output

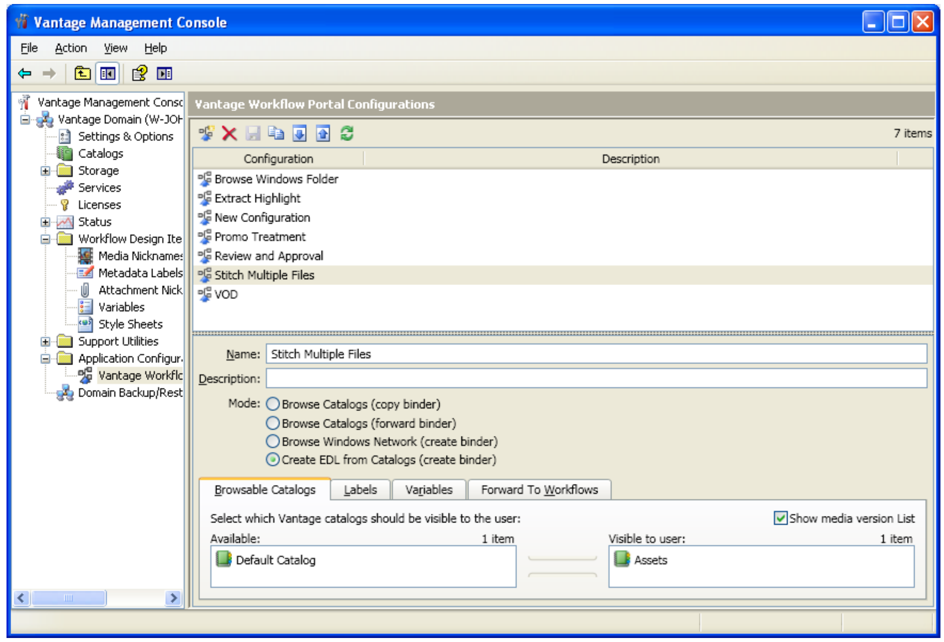
Step 3: Workflow Portal Configuration

The Workflow Portal configuration is set up as follows:

1. The *Create EDL from Catalogs configuration* template is selected
2. The *Assets* catalog is selected

3. The target workflow is made available to the operator

Figure 62. Typical EDL configuration.



Workflow Portal Tour: Extracting Highlights

This tour describes how to configure the label design, ingest workflow, target workflow, and Portal configuration, to allow operators to mark in/out points on a master asset for highlight extraction, and also choose distribution channels and enter metadata.

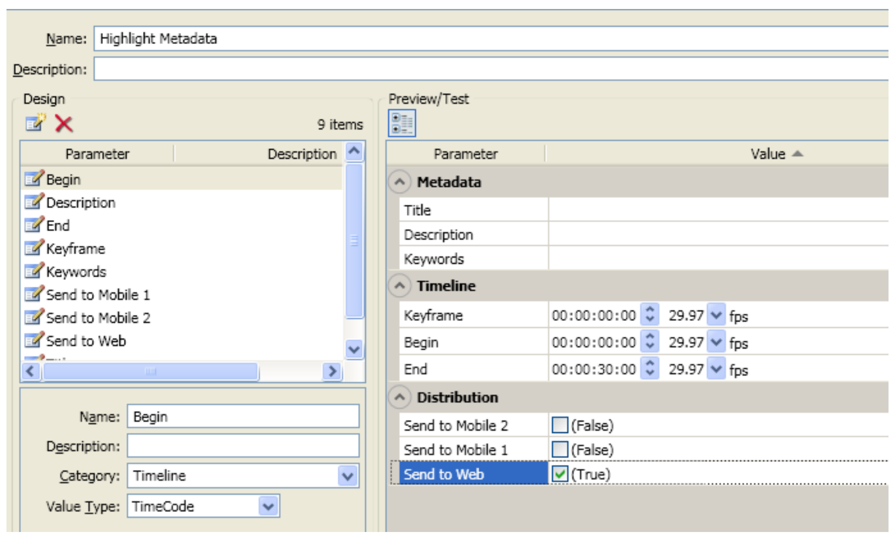
Step 1: Label Design

In this workflow, the operator provides the following information:

- What timecodes should be used for the highlight start, end, and keyframe
- A description and title for the highlight
- To which distribution channels the highlight should be sent

The label is designed accordingly, as illustrated here:

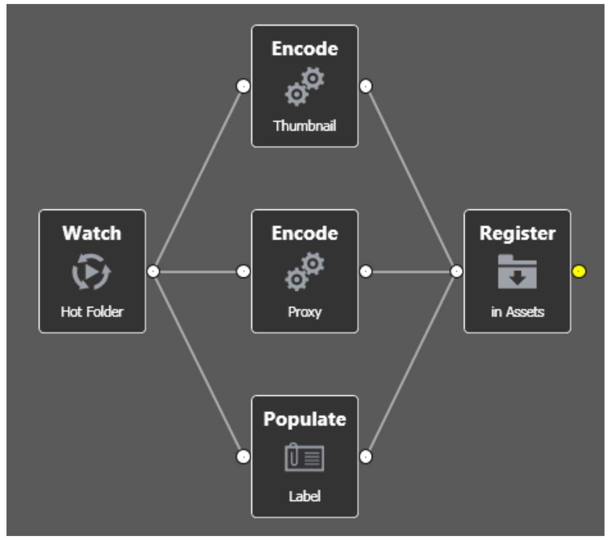
Figure 63. Typical extracting highlights label design.



Step 2: The Ingest Workflow

This workflow watches a hot folder for incoming media files.

Figure 64. Typical extracting highlights ingest workflow.



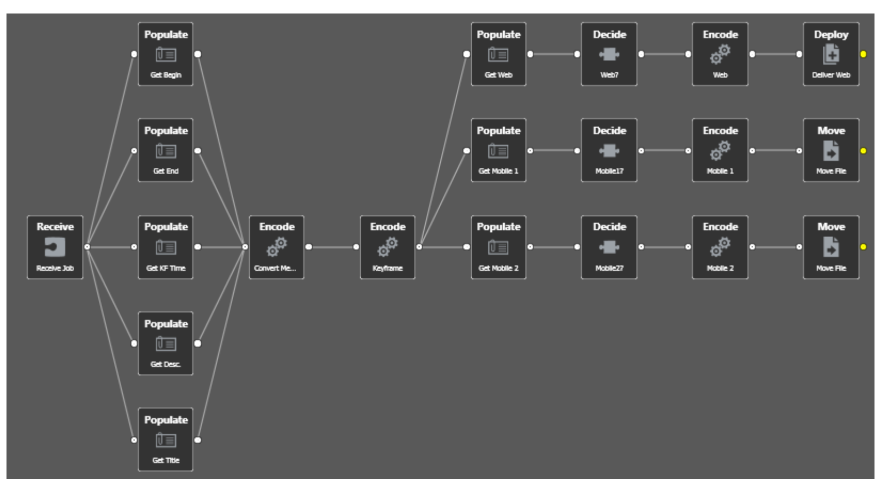
When new files are detected, the workflow will:

1. Generate a Windows Media proxy at 29.97fps, with the nickname *Vantage Proxy*.
2. Generate a JPEG thumbnail at 5 seconds, with the nickname *Vantage Thumbnail*.
3. Populate the Highlight label in the binder, with the default values.
4. Register the binder in the catalog named *Assets.*

Step 3: The Target Workflow

The target workflow uses the metadata provided by the operator as follows:

Figure 65. Typical extracting highlights target workflow.

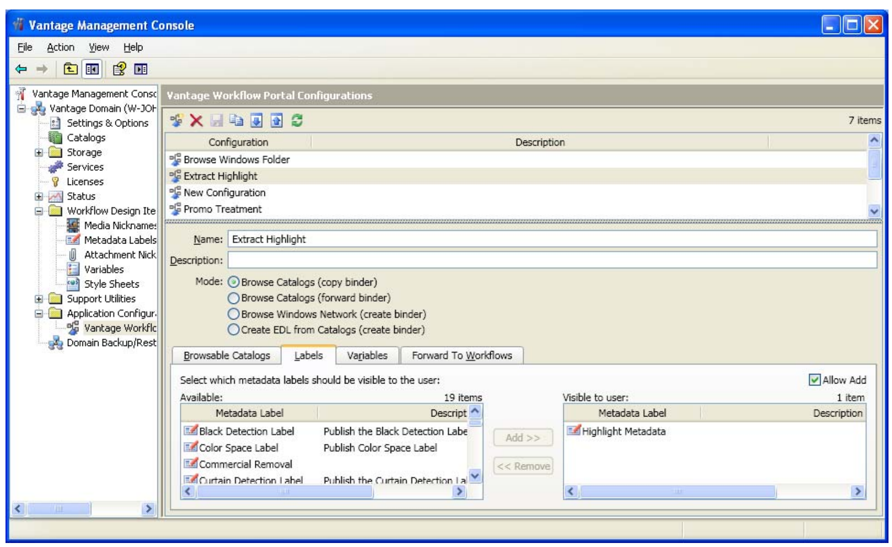


1. Receives from the Portal, and expects the *Original* asset to be available.
2. Uses the Populate action to extract the timecodes and metadata from the label, as variables.
3. Trims the original to a short, mezzanine format that can be used for multi-channel transcoding, using the Start/End timecodes specified by the operator.
4. Creates a JPEG keyframe at the time specified by the operator.
5. Uses the Populate action to extract the true/false values specified by the operator checkboxes for distribution channels.
6. Uses those true/false values to determine whether each branch of the workflow should execute.
7. Encodes the appropriate output formats, embedding the metadata information provided by the operator into the output files, and deploying to the target.

Step 3: The Portal Configuration

The Portal configuration is set up as follows:

Figure 66. Typical extracting highlights portal configuration.



1. The Browse Assets (Copy Binder) configuration template is chosen.
2. The Assets catalog is selected.
3. The Highlights metadata label is made available to the operator.
4. The target workflow is made available to the operator.

Chapter 4

Configuring Distributed Domains

This chapter describes how to implement a distributed (multi-server) Vantage domain.

A *Vantage domain* is a collection of computers, Vantage workflows, actions, Vantage services, jobs, binders, configuration settings and templates all known to and interacting each other, stored in a Vantage database. This collection constitutes a Vantage domain. Vantage domains may exist on a single computer or they may be distributed across many computers for durability and scalability.

An All-in-One (single-server) Vantage domain is one in which ALL components of Vantage - the Microsoft SQL Server Express database, all Vantage services, and client programs - are installed and operate on a single computer.

By definition, a distributed (multi-server) Vantage domain is one in which ANY of the components of Vantage - the Microsoft SQL Server Standard database, andy Vantage services, and any client programs - are installed and operate on more than one computer.

To implement a Vantage domain across multiple servers - creating a distributed domain - specific configurations must be applied to all computers that host any Vantage service or host the Vantage database for the distributed domain.

Topics

OVERVIEW

Note: *For complete details on platform requirements and installation tasks and steps, refer to the Vantage Installation Guide.*

Vantage is an enterprise-class application; as such, Vantage should be installed on server-class operating systems (Windows 2003|Windows 2008). Windows XP is supported only for All-In-One domains. The All-In-One configuration installs the entire Vantage software components on a single server. In a single-server domain, Vantage will only utilize components on the local system.

If a distributed, scalable Vantage domain (similar to a server farm or FlipFactory FactoryArray) is required - with several machines participating in the domain - the supported operating systems are Windows 2003 and Windows 2008. These systems are specifically designed to meet the demands and requirements of a distributed, enterprise-class product.

If you are installing Vantage on multiple machines to create a distributed Vantage domain, for Vantage services (including a central database) to interact with one another, they must be part of a network topology that allows Vantage services on one computer to interact with Vantage services on the other computers.

Vantage services must be installed on machines in the same subnet. Vantage services installed on different subnets are not able to locate one another. The service discovery process is based upon UDP protocol, which does not extend beyond the boundaries of the current subnet.

Note: *To properly operate Vantage across multiple machines, resources that are specific to a single computer should not be created. For example; a depot should not be identified with a local reference (for example, C:\Depot1) in a distributed domain. Instead create a share and use the share name to access the depot.*

License Requirements

A distributed Vantage domain requires one Array, Enterprise Control, or Master Control license per server. (You cannot mix those three in a single domain.)

Specifying Each Vantage Service's Logon Identity

The logon identity of each Vantage service in the distributed domain must be identical. The logon identity must also be a domain user that has access to all resources that must be accessed by the service.

Note: *After installing Vantage services on your Vantage servers, you must add them to the domain to identify and register them for usage. You add Vantage services in the Management Console > Services tab.*

Telestream recommends that a specific Windows user be defined by your Network Administrator (IT) for use by all Vantage services. *VantageUser,* for example, is the user name used in all examples in this guide.

Also, the servers hosting a distributed Vantage domain should all be part of a Windows Domain. The examples in this guide use the name *Starfleet*.

Perform these steps for each Vantage service on each computer in the distributed Vantage domain:

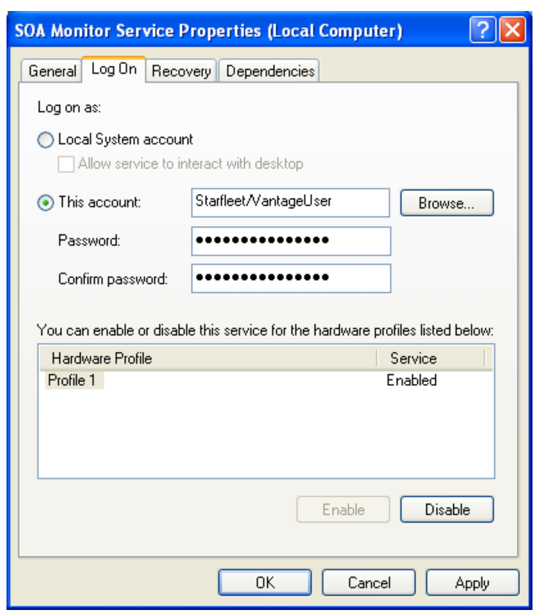
Step 1 Open Windows Control Panel and open Administrative Tools.

Step 2 Double-click Services to display the Services window.

Step 3 Right-click the target Vantage service and select Properties to display the Properties window. (All Vantage services begin with the word *Vantage*).

Step 4 Click the Log On tab:

Figure 67. Typical Log On settings.



Step 5 Select *This account* and enter the logon identity *(e.g. VantageUser*).

Step 6 Click OK to update the logon identity and close the window.

Note: *In some cases, you may be required to indicate that the specified user has been granted log on as a service right. If the service fails to start and displays an error indicating that the identity of the service may not have the necessary permissions, consult your IT administrator to set the appropriate rights for the new account.*

Configuring the Distributed Transaction Coordinator

Vantage uses Distributed Transactional Coordinator (DTC) (a Windows service) communication between services and the SQL Server 2005 database to guarantee that messages are processed as atomic messages (that is, the entire message is successfully processed or the database state is reverted to the pre-message state). This guarantees that services do not duplicate jobs and that jobs do not register in a partial or incomplete state in the database. In a Vantage domain, the DTC is must be running and configured in a specific manner.

The Vantage installer ensures that DTC is running and is configured for use by Vantage services and the database. This section outlines how the installer functions. This topic is presented for informational purposes only - users do not have to make these changes unless the DTC configuration is changed subsequent to Vantage installation.

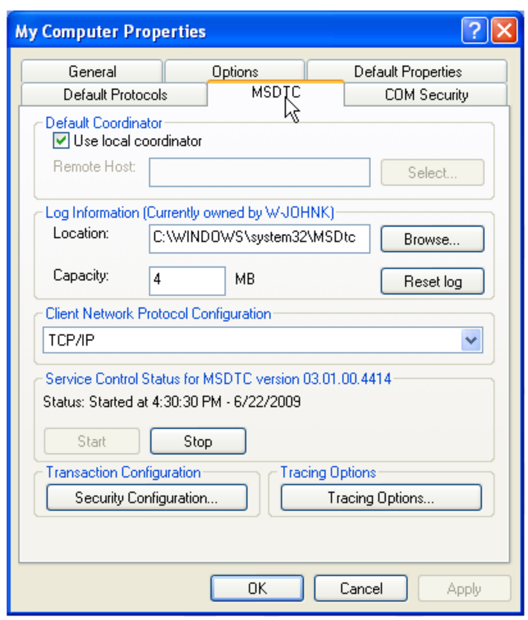
Each computer that hosts services or hosts the database in the domain must have specific Distributed Transaction Coordinator properties set.

Certain properties need to be set to enable transactions to transfer.

Step 1 To access the Distributed Transaction Coordinator security configuration, open the Component Services window from the Administrator Tools.

Step 2 Navigate to Component Services >Computers > My Computer icon. Select Properties from the Context menu associated with My Computer.

Figure 68. The Component Services Properties.

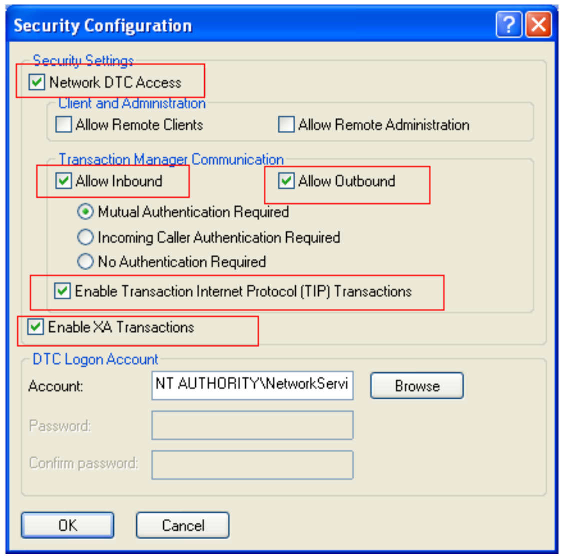


Step 3 In the Properties window, select the MSDTC tab.

Step 4 Next, click Security Configuration at the bottom of the window.

Step 5 To enable transactions to properly flow from one machine to another, select these options:

Figure 69. The Security Settings options.



Note: *You have to restart the database instance in order for SQL to receive notification of the changes to the DTC. You can restart the database by restarting the server that the database is on.*

Appendix A

Vantage Domain Port Usage

This appendix describes and specified port usage in a Vantage domain.

Vantage uses certain IP ports for various purposes, as described below.

UDP and WS-Discovery

The following ports are utilized for UDP and WS-Discovery:

UDP port: 3702	HTTP Port: 46123

Mail and FTP

The following ports are utilized for other communication:

Mail: 25	FTP: 21

Vantage Services

The following default ports are utilized by Vantage SOA facility services.

Agility Bridge Service	HTTP: 8678	TCP: 8679
Analysis Service	HTTP: 8672	TCP: 8673
Catalog Service	HTTP: 8664	TCP: 8665
Communicate Service	HTTP: 8662	TCP: 8663
Metadata Service	HTTP: 8674	TCP: 8675
Monitor Service	HTTP: 8658	TCP: 8659
SDK Service	HTTP: 8676	TCP: 8677
Transcode Service	HTTP: 8670	TCP: 8671
Transport Service	HTTP: 8660	TCP: 8661

Other Components with Firewall Considerations

Vantage utilizes/communicates with following components, which should be considered when implementing firewall configurations.

Microsoft Distributed Transaction Coordinator - see Microsoft documentation.

Microsoft SQL Server 2005 - see Microsoft documentation.

Avid Interplay (Unity Client, Transfer Engine, Web Services) - see Avid documentation.

Agility ECS - as configured in Vantage console and in Agility ECS.

FTP - as configured in Vantage workflow.

Grass Valley AMP - Port 3811 by default.

Harris FTP - Port 2098

Glossary

action An *action* is the smallest unit of work that can be specified in a Vantage workflow. Actions are connected together in a workflow to perform a useful task. Each action must be configured to perform its task in the context of the workflow, using an action inspector. Action inspectors are specific to each type of action.

Actions are grouped by functional categories: communication, transcoding, file operations, metadata processing, etc. Each action is defined by the specific task they perform. For example, an email action, or a metadata label/file transformation action.

Actions have limited interdependency, and so, are very flexible. You may impose limitations on actions in a workflow. For example, you might require action B to depend on action A in a Vantage workflow.

Actions - during execution - operate on binders, variables, and states, and they generate an action state when they complete. Actions are executed by Vantages services, which perform the requirements of the action.

action state The *action state* describes the condition of an action execution in process and after completion.

During execution, an action may be Queued | Paused | In Process | Waiting. After execution, an action's final state may be Pass | Ignore | Failure. These states display in the Workflow Designer Job Status tab.

During workflow execution, action states are passed to subsequent actions. These keywords may be tested by downstream actions, to determine whether or not following actions should execute.

You can also specify that an action should execute on any state (right-click and select Perform On > Any.

If an action fails, then the next action will inherit the Failure action state and (in most cases) will not execute. If one action fails, the entire job fails.

Similarly, if an action sets the Ignore state, the next action will inherit the Ignore state and will also likely not execute. Certain special actions, such as Message, can be configured to perform on certain states - this allows workflows to send an email if they detect a failure.

Action states have precedence when an action receives states from multiple incoming actions (a merge of multiple branches):

- If at least one incoming state is Failure, regardless of other incoming states, the action will inherit the Failure state - Failure has precedence over all action states.

- If there is no Fail state, but at least one Pass state, then the action will inherit the Pass state- Pass has precedence over Ignore states.

- Only if all incoming states are Ignore, will the action will inherit the Ignore state. Ignore has lowest precedence of the three states.

Agility service The *Agility service* is the Vantage component (operating as a Windows service) which executes the actions relating to Agility job submission and interaction with Agility: Job Profile, and Job XML. Agility features are enabled in Vantage Enterprise Master Control.

All-in-one domain An All-in-One (single-server) Vantage domain is one in which ALL components of Vantage - the Microsoft SQL Server Express database, all Vantage services, and client programs - are installed and operate on a single computer.

analysis service The *analysis service* is the Vantage component (operating as a Windows service) which executes the actions relating to the analysis of content: Examine, Compare, and Identify.

associate action An *associate action* uses the monitor service to continually (and at regular periods) poll a target location (a directory, for example) on a device or file system (FTP, network folder, etc.) to discover new files, based on some permutation of the name of the file being processed.

Associate actions can be executed on any action state.

Generally, the associate action uses the file name of an existing media file or attachment as the basis for discovering new files. For example, if media file *Vantage.mpg* is currently in the workflow, then the associate action may look for *Vantage.scc*. This behavior can be configured in the associate action's inspector.

Associate actions begin executing when a job is submitted, and execute until a new file is discovered - subsequent actions do not execute until the file is found. When the new file is discovered, the associate action makes the file available to the other actions in the workflow.

Configuration is accomplished in the inspector, and is based on the target device/file system being monitored and other requirements.

attachment An *attachment* is a non-media file that is associated with media during execution of a workflow. For example, an attachment may be an XML file that contains metadata, an SCC caption file, an STL or PAC subtitle file. Attachments may also be a PDF file, Excel spreadsheet, or Word document, for example. Attachments are identified and processed using nicknames for simplicity. Processing is optional - attachments may be simply passed through a workflow for storage with the processed media and registered in the Vantage catalog.

attachment nickname See nickname.

binder A binder is a collection of media files, attachment files, metadata labels, and metadata tracks. All workflows in Vantage operate upon binders. A binder allows a Vantage workflow to keep track of dozens of files while the workflow executes.

Files within binders are referenced by nickname - that is, a binder is not a physical location, rather a collection of references. The underlying files may be moved around without changing the nickname of the file. This allows a binder to be submitted to, or passed between, workflows without requiring that the files be in specific locations.

Binders are referenced by jobs, and by the catalog. If a binder is not in the catalog, and not associated with a job, then the binder will be deleted. When a binder is deleted, any temporary files (such as media files in Vantage Stores) will also be deleted.

binder mode *Binder mode* is the preferred mode for designing Vantage workflows. In binder mode, workflows reference files by nickname and lines connecting actions only indicate the execution flow of those actions.

See file mode.

catalog See Vantage catalog.

catalog service The *catalog service* is the Vantage component (operating as a Windows service) that executes actions utilizing the Vantage catalog.

See register action.

common actions *Common actions* are actions that can be executed by any Vantage service; they do not have a dedicated Vantage service.

See receive action, forward action, decide action.

communicate service The *communicate service* is the Vantage component (operating as a Windows service) that executes the actions relating to electronic messaging.

See message action, notify action.

compare action A *compare action* compares media files to calculate certain metrics (for example, PSNR). These metrics can generally be published as variables or as a label.

compute action A *compute action* performs various arithmetic and string manipulation functions, permitting you to create and modify values in variables, for use in downstream actions.

console The term *console* is an informal name for the Vantage Management Console.

See Vantage Management Console.

copy action A *copy action* 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.

Copy actions can be executed on any action state.

database The term *database* is the common term used to refer to the Vantage database, where all specifications for the domain are stored, along with workflows and job history.

decide action A *decide action* is an action which sets the action state based upon variables. It is most commonly used to decide whether or not a branch in a workflow should execute (by setting the Pass state) or not (by setting the Ignore state).

Note that when the decide action is used, the state gets passed to the next action; as a result, for decision branches more than one decide action will usually be used. For example, if one branch is for HD, it will start with a decide action that will set the state to Pass for HD content, ignore otherwise; if another branch is for everything else, it will start with a decide action that performs the opposite behavior.

See variable, action state.

delete action A *delete action* is used to permanently remove a file from a source target (file system/device and directory).

Delete actions can be executed on any action state.

deploy action A *deploy action* is used to save the specified files to a destination outside the Vantage domain. Unlike the move or copy actions, deploy actions allow multiple files to be deployed simultaneously, and do not maintain a reference to those files in the binder after it completes.

Deploy actions can be executed on any action state.

domain See Vantage domain.

encode action An *encode action* implements the specified codec, which is used to transcode a media file into another media file types.

Enterprise Edition Vantage Enterprise is a special edition of Vantage, which adds system management features which enable a high level of visibility and a deep level of control for large-scale or mission-critical workflows. Vantage Enterprise is offered in two licenses: Enterprise Control, and Master Control.

examine action An *examine action* evaluates the video and audio of a media file to measure certain characteristics, such as audio loudness, or to detect characteristics, such as the presence and size of curtains. You can configure it to publish metadata or variables containing the results of analysis.

failover database The term *failover database* is the term used to refer to the optional mirrored database, which the Vantage domain will automatically be transitioned to in the event of a failure of the primary database.

file mode File mode is the simplest mode for designing Vantage workflows. In file mode, lines connecting actions represent the path that files take through a workflow. In file mode, nicknames are not required; if a new file is created, subsequent actions will operate on the new file automatically.

File mode has some limitations due to the fact that it does not allow the use of nicknames. For example, a delete action cannot be used in file mode workflow - it would simply delete the file in the workflow, leaving it without a file to process. To access the full functionality of Vantage, binder mode is recommended.

forward action A *forward action* forwards a binder and all current variables to another workflow, starting a new job with the target workflow. A forward action may be added to the end of a workflow, and requires that the target workflow has a receive action as its first action.

Typically, workflows are created with a receive action when they are intended for execution by another workflow that immediately precedes this one. This ability to chain workflows enables you to create comprehensive, intelligent run-time switching workflows consisting of smaller workflows used as building blocks.

See receive action.

hot folder A *hot folder* is a slang term for a directory on a server that has been identified as a directory for storing media to be processed by a workflow in Vantage. When the workflow monitor identifies new media in this folder, it is submitted for processing.

inspector An *inspector* is a series of one or more panels in Vantage Workflow Designer that facilitate the setup and configuration of a given action. Inspectors are unique to each action - for example, configuring a watch action is very different than configuring an encode action.

identify action An *identify action* determines technical properties of a media file, such as codec type, video bitrate, or file size. This information can then be published as a metadata label, or as variables.

job A *job* is an execution of a Vantage workflow. Jobs have a state (separate from action states), and jobs are comprised of actions that are executing. Jobs, like actions, may be in-process or they may be complete.

As a job executes, each action may be performed by any service (on any computer) in the Vantage domain that is capable of performing it. The capability of a service to perform a specific job depends on its current operating state, its workload, and its suitability, defined by qualification rules.

Jobs for a given workflow can be viewed in the Workflow Designer by selecting the workflow in the Workflow Designer tab and displaying the Job Status tab. Alternatively, all in-process and failed jobs within a Vantage Domain may be viewed in the Status section of the Management Console.

job profile action Use the job profile action to submit jobs to Agility for processing; definition of the job is provided directly in Vantage by configuring the action.

job XML action Use the XML profile action to submit jobs to Agility for processing; definition of the job is provided in an XML file.

job routing See qualification rule

job state A *job state* is the current condition of a job. Keyword values are Start | Pause | Success | Fail | In Process.

Job Status Web App The J*ob Status Web App* enables you to view real-time information about jobs in the domain from anywhere on your network with a Web browser. The Job Status Web App is installed on the IIS server on your Vantage Domain database server. This Web app is available in all Vantage Enterprise licenses.

label A *metadata label* defines a set of metadata by use of name/value pairs associated with content. For example, a spot label may contain Agency, Author, ISCI, and other metadata values; this set of metadata is collectively called a Spot metadata label. Metadata labels are stored in binders with the associated media and attachment files.

Vantage supplies several metadata label templates for use in workflows. In addition, you can create and modify labels for your use using the Management Console (Templates > Metadata Labels).

license A *license* is stored in the Vantage database. Generally, licenses are imported as XML files into the database through the Management Console.

media nickname See nickname.

message action A *message action* is an action which enables you to generate and transmit an electronic message - an email, for example. You must configure Vantage to use an SMTP server (Management Console: Vantage Domain > Settings & Options > Email) before email can be utilized.

metadata service The *Metadata service* is the Vantage component (operating as a Windows service) that executes the actions relating to the transformation of metadata between labels, variables, and XML files.

See also populate action, transform action.

metadata track A *metadata track* is time-based or temporal metadata associated with media. For example, closed caption metadata is defined as a metadata track.

monitor service The *Monitor service* is the Vantage component (operating as a Windows service) that executes the actions relating to the discovery of files and starting jobs.

See also watch action, associate action.

move action A *Move action* is used to move 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, then deleting the source.

Move actions can be executed on any action state.

nickname *Nicknames* are user-defined strings that are used to reference files within a Vantage workflow. Nicknames allow users a convenient way to design workflows independent of the actual file locations or underlying file names. As a workflow executes, it maintains a collection of underlying files called a binder; nicknames allow the workflow to access files within the binder.

Nicknames may refer to either media files, or attachment files. Certain actions will only allow the use of certain nickname types; for example, a transcode action only allows media file nicknames to be used as the inputs and outputs. However, other actions (such as move and copy actions) operate on any type of file, and allow the use of any nickname.

The use of a nickname does not affect the actual name of the underlying file, nor do nicknames have any special meaning. For example, providing a media file the nickname *Flash* does not necessarily mean that the media file is in fact a Flash file.

Nicknames can be managed in the Management Console under Workflow Design Items > Media Nicknames. Nicknames can also be entered manually, directly in the Workflow Designer.

The word *Original* is a reserved nickname specific to media files.

notify action A *notify action* is an action which saves job information to a file, or which interfaces with an external system. You can configure a notify action to produce an XML file, and you can invoke a Web service via a URL.

populate action A *populate action* uses the metadata service to transform data between variables and metadata labels, and publish variable values from the label for use in downstream actions.

Populate actions can be executed on any action state.

qualification rule A *qualification rule* influences or controls the routing and execution of actions among Vantage services of the same type in a distributed Vantage domain. Qualification rules can be used to ensure that jobs are routed to services that are best suited for the task. Vantage uses values contained in variables to determine the suitability of a given service to execute the action.

For example, one machine in a domain has specialized hardware - a fibre connection. In workflows where move and copy actions require the fibre connection, qualification rules specify that the specialized machine (which hosts a Vantage transport service) execute those workflows. This is accomplished by (1) adding a qualification rule to all other transport services in the domain indicating that they cannot executed actions that require a fibre card or (2) adding a *fibre card required* variable to the action in the workflow that requires the fibre card.

Qualification rules are exclusively based on variables; they are not based on any actual machine analysis. As a result, it is up to the system administrator to correctly set up variables and qualification rules, and apply variables to the appropriate actions to ensure that jobs are routed correctly.

Qualification rules are created and managed in the Vantage Management Console: Vantage Domain > Services.

receive action A *receive action* provides a starting point for new jobs in Vantage workflows that are not started by a watch or other starting action.

Typically, workflows are created with a receive action when they are intended for execution by another workflow that immediately precedes this one. This ability to chain workflows enables you to create comprehensive, intelligent run-time switching workflows consisting of smaller workflows used as building blocks.

Workflows that end with a forward action are used to start receive action-based workflows. When you chain workflows, you can pass binders and variables between them.

See forward action.

register action A *register action* uses the catalog service to place a binder into the Vantage catalog. Register actions can be executed on any action state.

See also Vantage catalog.

resource unit A *resource unit* is an integer value, implemented in the Vantage Management Console on each action type to specify a relative computer resource consumption value in relation to all other action types. This value enables Vantage to maximize resources and optimize transactions, so that you can tune your Vantage system for the highest possible throughput on your particular hardware.

service See Vantage service.

single-server domain See All-in-one domain.

synchronize action A *synchronize action* is a connector action, for the purpose of uncluttering workflow connectors. In workflows where there is a many-to-many relationship (for example, 6 encodes connect to 6 deploys, which connect to 6 deletes), instead of drawing all six connects from each action, you can simply connect them to a common synchronize action. There is no inspector for the synchronize action, because no configuration is required.

Transform actions can be executed on any action state.

Team Management Team Management is a licensed feature in a distributed Vantage domain, which adds user access control. By creating specific Vantage users (and optional passwords) in the Vantage domain console, Vantage administrators can control access to workflows in Workflow Designer and Workflow Portal. You can also control access to the Vantage Console, thus limiting who can configure and control the domain itself.

transcode *Transcode* means the process of decoding media in one format (MPEG2, for example) down to digital baseband and then encoding it in another format (MPEG4, for example).

transcode service The *transcode service* is the Vantage component (operating as a Windows service) that executes the encode action - transforming media from one format to another.

See encode action.

transport service The *transport service* is the Vantage component (operating as a Windows service) that executes the actions relating to file operations: move action, delete action, copy action, and deploy action.

transform action A *transform action* uses the metadata service to transform metadata between XML files (attachments) and labels. XSL stylesheets are used to perform these transformations; stylesheets can be managed in the Vantage Management Console: Vantage Domain > Catalogs.

Transform actions can be executed on any action state.

Vantage catalog The *Vantage catalog* (or simply catalog) allows the management of binders that you want to exist past the life of an individual job. Folders can be created in the catalog with individual expiration rules.

The catalog and its folders are not a physical location; rather they are a way of organizing binders and controlling when the binders - and the underlying files - are deleted.

Vantage database A *Vantage database* is a Microsoft SQL Server database which contains all workflows, actions, jobs, binders, licenses, and configuration information for a Vantage domain.

Vantage domain A *Vantage domain* is a collection of computers, Vantage workflows, actions, Vantage services, jobs, binders, configuration settings and templates all known to and interacting each other, stored in a Vantage database. This collection constitutes a Vantage domain. Vantage domains may exist on a single computer or they may be distributed across many computers for durability and scalability.

Multiple Vantage domains may exist on a network, but they are independent entities that do not communicate with each other. They are not bound together and do not share resources or work. The purpose of storing an entire domain in a database is to provide an easy way to create and manage the domain and to provide access to all the details about each resource in the domain to any other resource that needs it.

Vantage folder A *Vantage folder* is a directory on a supported file system that is stored in the Vantage database, which is used in move and copy actions. Unlike Vantage Stores, files placed in a Vantage folder are not deleted when the binder is deleted. Vantage folders are used for output folders of files.

Vantage folders are managed in both the Vantage Management Console and Vantage Workflow Designer. Changes to a Vantage folder - such as updating an IP address or a password - immediately affect all workflows.

Vantage Management Console The *Vantage Management Console* (usually referred to informally as *the console*, for short) is a Windows MMC program that enables Vantage system administrators to effectively configure Vantage domains, and scale domains across multiple servers to meet their operating requirements and perform effectively in their environment.

Vantage service The term *Vantage service* refers to the collection of software components (operating as Windows services) in Vantage that implement and execute the actions in a workflow as it executes as a job.

Vantage store A *Vantage store* is a directory on a Windows file system that used for storing temporary files. Stores are managed by the Vantage domain for the purpose of centralizing large directories for reading and writing files. Unlike a Vantage folder, files placed in a Vantage store are deleted when the binder is deleted. Vantage stores are generally used to hold temporary files for the duration that a job is executing.

Vantage stores are managed in the Vantage Management Console: Vantage Domain > Storage. Services that create temporary files, such as the Transcode service, can be configured to use specific stores.

Vantage Workflow Designer Vantage Workflow Designer is a client program that enables you to create and edit workflows, activate and deactivate them, and monitor their status and review jobs in process and jobs that have completed.

Vantage Workflow Portal Vantage Workflow Portal is a client program that features a customizable set of functionality to support various operator-related tasks: Selecting media and submitting jobs, updating variables and metadata and forwarding jobs, creating EDL-base jobs, etc.

Customization is implemented in the Vantage Management Console, when Vantage administrators construct the user interface and functionality they want for a given task, then save it. When operators launch Portal, they select the configuration appropriate to the task at hand, and Portal dynamically implements the appropriate user interface from the configuration file.

variable A *variable* identifies temporary job metadata. Variables have a name (such as *Number of Audio Channels*), a type (such as *Integer Number*) and a default value. Variables values can be set inside a job in a variety of ways: Through analysis, through metadata population, in the watch and associate actions, as a property of an action, or by a service as it executes an action.

Variables are used by Vantage services and actions to control their behavior and workflow logic. The majority of parameters in Vantage can be bound (or attached) to variables, allowing the workflow to dynamically update on a job-by-job basis.

For example, a variable may be assigned a value by an analysis action to determine how many lines of black are at the top of a video frame; a crop filter later in the workflow can bind to that variable, ensuring that every crop in every job is appropriate to the workflow requirements.

Variables in services may be also be used for job routing. For example, an action with a FibreRequired=TRUE variable must pass this condition to a service which evaluates the condition to determine if it can successfully perform the action.

Variables can be created in the Management Console (Vantage Domain > Templates > Variables) or in Workflow Designer, and assigned for use in workflows and services.

watch action A *watch action* uses the monitor service to continually (and at regular periods) 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 - typically, a media file.

Web Dashboard The *Web Dashboard* enables you to important domain information from anywhere on your network with a Web browser. The Web Dashboard is installed on the IIS server on your Vantage Domain database server. The Web Dashboard is available in Vantage Enterprise Master Control.

workflow A *workflow* in Vantage is a set of actions designed to perform an automated process. Vantage workflows are created using the Vantage Workflow Designer by adding and configuring actions and connecting them together. Workflows are stored in the Vantage database, and executed by Vantage services.

Workflow Portal Short for Vantage Workflow Portal. Also sometime called just *Portal,* for short. See Vantage Workflow Portal.

Workflow Designer Short for Vantage Workflow Designer. Also sometime called just *Designer*, for short. See Vantage Workflow Designer.

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