Vantage 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 in Workflow Designer by functional categories: communication, transcoding, file operations, metadata processing, etc. Each action is defined by the specific task it performs. For example, an email action, or a metadata label/file transformation action. All actions are executed by Vantage Windows services, which correlate to the functional categories.

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.

During execution, actions operate on files, binders, variables, and states, and they generate an action state when they complete. Actions are executed by Vantage services, which perform the requirements of the action. In the case of the Vantage Transport Service and most transcoding services, the services may manage file transfers and transcoding/rendering via an out-of-process resource.

AAF action

The AAF action uses the Vantage Avid Service to ingest incoming AAF files and processes the MXF folder referenced in the AAF file. Avid Media Composer then utilizes Persistent Media Record (PMR) files for information about the online status of file Media Object information (MOB). Each PMR file provides an index in a form that an editor can quickly load all the file MOBs and their associated media files in the media directory in which the PMR file resides.

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 Success | Ignore | Failure. Certain actions (Decide/Examine/Compare/Identify, for example) allow the use to specify the post-

1



execution state, including Ignore. For all other actions, the post-execution state is set by the service, and is either Success or Failure. These states display in the Vantage Workflow Designer Job Status tab.

Action states are always passed to subsequent actions. The incoming state is tested by the next actions to determine whether or not following actions should execute.

Some actions allow you to specify that an action should execute on a specific state (right-click the action, and select Perform On > Success | Failure | Ignore | Any).

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

Similarly, if you specify an action to set 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 any state (Failure, for example)—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 Failure state, but at least one Success state, then the action will inherit the Success state. Success has precedence over Ignore states.

- If all incoming states are Ignore, the action will inherit the Ignore state. Ignore has lowest precedence of the three states. If an action receives an Ignore state and does not explicitly fail, then it emits a Success state. Otherwise, it emits a Failure state *unless* it is an action which can emit Ignore, and you have configured it to do so.

Alchemist File action

The Alchemist File action, which is executed by the Vantage Alchemist Service, allows you to configure connection settings with an existing installation of Grass Valley Alchemist File software.

Vantage Alchemist Service

The Alchemist Service allows Vantage to interact with an installation of the Grass Valley Alchemist software via the Alchemist File action. For configuration and set up details, see the Alchemist File app note available on the Telestream web site.

All-in-one domain

An *all-in-one* (or single-node or single-server) Vantage domain is one in which all server components of Vantage—the Microsoft SQL Server database, all Vantage services, and the optional Vantage web applications—are installed and operate on a single computer.

See also Vantage array.

Analyze action

The Analyze action, which is executed by the Vantage Analysis Service on-premises or the Telestream Cloud Service when in Cloud mode, enables you to perform analysis on media using a variety of analysis tools, specifying the result of the analysis in variables, for use in downstream actions. It is Vantage Cloud capable.

Vantage Analysis Service

The *Analysis Service* is the Vantage component which executes the actions relating to the analysis of content: Examine action, Compare action, Identify action, Analyze action, Report action, and MediaInfo action.

Archive action

An Archive action, which is executed by the Vantage Staging Service, uses the selected archiver (TAR, for example) to convert the selected input file to another format, usually in preparation for copying, moving, or deploying a file to a given system that has special file format requirements.

array

An informal term for Vantage array.

Vantage Aspera Service

An *Aspera Service* implements the Aspera software for Vantage, and provides twoway communication between workflows (and the Faspex Delivery action) utilizing the Aspera software itself.

Asset Monitor action

The Asset Monitor is an origin action. It uses the Vantage Avid Service to monitor the specified Interplay server for new files to ingest and generate output in one or more media descriptor formats [CML (Interplay Metadata) or MPEG 4 Reference files] from the ingested input file. This action is Open Workflow capable.

When a new file is discovered, the Asset Monitor action submits a job for the workflow to process the file.

Associate action

An Associate action uses the Vantage 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 by the current job.

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, or an STL or PAC subtitle file. An attachment 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 a Vantage catalog.

attachment nickname

An *attachment nickname* is an alias or alternate name that is assigned to an attachment file during Vantage workflow execution. When an attachment file is submitted to a workflow, the actual file name and location is stored in a Vantage binder along with a nickname as defined in the workflow. Within the workflow, all references to a file are by nickname. However, when Vantage needs to access a file, Vantage uses the actual file name and location stored in the binder.

See media nickname and nickname.

AudioTools action

An AudioTools action is an optional, licensed feature in Vantage. It uses the Vantage AudioTools Service to enable Vantage workflows to utilize and interact with various AudioTools products from Minnetonka Audio Software. The AudioTools Custom Workflow executes a selected, pre-defined AudioTools Server workflow. AudioTools Loudness Control executes the typical loudness processes, including hitting multiple target parameters using an iterative processing pass.

Vantage AudioTools Service

The *AudioTools Service* implements the AudioTools Connector and enables Vantage workflows to utilize and interact with various AudioTools products from Minnetonka Audio Software.

Aurora action

An Aurora action is an optional, licensed feature in Vantage. It uses the Vantage Aurora Service to enable Vantage workflows to utilize and interact with various QC tests provided by the Digimetrics Aurora software. The tests provide the ability to determine whether a particular input media (specified by nickname) either passes or fails a particular QC check. Each test also generates a report file that may be utilized during later stages of the workflow.

Vantage Aurora Service

The *Aurora Service* implements the Digimetrics Aurora software for Vantage, and provides two-way communication between workflows (and the Aurora action) utilizing Aurora and the Aurora software itself.

Automate action

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

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

Vantage Avid Service

The Avid Service is the Vantage component which executes the actions relating to use of media on Avid Interplay servers using the Media Creation action, Asset Monitor action, and AAF action. Before you can use these actions in a Vantage workflow with a given Avid Interplay server, you must first create an Avid Interplay connection in the Vantage Management Console and configure it.

Baton action

A *Baton action* is an optional, licensed feature in Vantage. It uses the Vantage Baton Service to enable Vantage workflows to utilize and interact with various QC tests provided by the Baton software. The tests provide the ability to determine whether a particular input media (specified by nickname) either passes or fails a particular QC check. Each test also generates a report file that may be utilized during later stages of the workflow.

Vantage Baton Service

The *Baton Service* implements the Baton software for Vantage, and provides twoway communication between workflows (and the <u>Baton action</u>) utilizing the Baton software itself.

binder

A *binder* is a collection of file and metadata information, created for each job that Vantage executes. A binder contains media and attachment file references and metadata labels that were ingested or created during the job. While a binder is created for every job, many binders are never used. Therefore, only media processing scenarios which require operator intervention should use the Register action in ingest workflows to create binders in a user-accessible Vantage catalog.

You use the Register action to automatically create binders during a job, and you use Exist to determine if a binder of a certain name has already been created. Binders are most often named by some permutation of the name of the file that started the job. Binders that are not explicitly registered are accessible to users only in Workflow Designer, in the Job Status tabs.

Vantage catalogs and their binders are accessible in Workflow Portal. Binders are saved in the Vantage domain database until deleted manually or by job expiration policies. You can also view binders in the Vantage Management Console, and manually create them there—or delete them.

Binders are not file folders and are not part of the Windows file system—they are records in the Vantage database. Thus, binders do not contain the files themselves; they only have the paths to those files.



Camera Ingest action

A *Camera action* is an origin action; it uses the Vantage Monitor Service to regularly poll a target location (a directory, for example) on a card reader device or Windows file system to discover new camera files.

When a new file or shot is discovered, the Camera action submits a job for the workflow which it is part of, for processing.

Capture action

A Capture action is an origin action; it supports Open Workflows on the outbound side and it is used to capture live SDI | IP inputs and output captured media files to Live Storage using the specified output container and encoder. The Capture action is executed by the Vantage Live Service, and only works in a Vantage domain on a Lightspeed Live Server hosting Capture.

catalog

Similar in concept to the folders in a file system, a Vantage *catalog* is a container that stores <u>binders</u>. *Catalog folders* are sub-containers that organize binders. To access a binder, Workflow Portal operators search through the visible catalogs and folders, just as they might sort through folders in a file system.

Vantage Catalog Service

The *Catalog Service* is the Vantage component that executes the Register action and Exist action.

Catch action

A *Catch action* is an origin action; it is a specialized origin action for ingesting commercials and syndicated media assets (including metadata) from catch servers in TrafficManager applications. It uses the Vantage Traffic Service to regularly poll the catch server to discover new files.

When a new file is discovered, the Catch action exposes all relevant metadata and submits a job to the workflow for processing. Typically, the workflow is an ingest workflow which localizes the media, populates a metadata label, creates proxies and thumbnails, and registers the asset in a Vantage catalog. The Catch action also includes an interface to common cloud storage systems, allowing storage in the cloud to be monitored. For more details, see the TrafficManager User Guide.

Cerify action

A *Cerify action* is an optional, licensed feature in Vantage. It uses the Vantage Cerify Service to enable Vantage workflows to utilize the Tektronix Cerify suite of QC components. Cerify is a fully automated system for verifying and checking filebased content.

Vantage Cerify Service

The *Cerify Service* implements the Cerify software for Vantage, and provides twoway communication between workflows (and the Cerify action) utilizing the Baton software itself.

Change Log

The *Change Log* (Vantage Management Console > Support Utilities) captures changes to the Vantage domain configuration and operation and records the following details: date and time of change, Vantage user who made the change, host computer where the change occurred, change summary message.

Chronicle action

The Chronicle action, along with Colocate, Compose, and Conform actions, are part of the optional, licensed Post Producer feature in Vantage. The Chronicle action uses the Vantage Edit Service to convert post-rendered Composition XML files into formats for use in other systems—ad-insertion systems, for example.

Cloud mode

Cloud mode is an execution option that you can enable in Cloud-capable actions to enable processing in the cloud (enabled by configuring your Vantage domain with a valid Telestream Cloud account). When supported actions execute in Cloud mode, they are executed by the Telestream Cloud Service.

Telestream Cloud Service

The *Telestream Cloud Service* connects a Vantage domain with Vantage Cloud. The Telestream Cloud Service acts primarily as a proxy for Vantage Cloud as the Vantage component that is responsible for transporting files and executing actions which interact with resources in Vantage Cloud or are related to Cloud processing: Cloud Qualify action | Cloud Speech action | Location action. The Telestream Cloud Service is also responsible for executing the Analyze action | Compose action | Conform action | Flip64 action | IPTV Flip action | Multiscreen Flip action | Notify action | Tempo action | Timed Text Conform action | Timed Text Flip action when these actions execute in Cloud mode.

To use the Telestream Cloud Service and its associated actions and features in your workflows, you must have a Telestream Cloud account.

You can create a Telestream Cloud account on the Telestream Cloud web site: https://cloud.telestream.net. When you create your Telestream Cloud account, you are supplied an API key. Use this key in the Vantage Management Console > Settings & Options > Cloud tab to allow Vantage to log into your Telestream Cloud account automatically to perform Cloud processing that you specify in workflows.

Cloud Qualify action

The *Cloud Qualify action* is part of the Cloud group, which is executed by the Telestream Cloud Service. The Cloud Qualify action is supported in Vantage Cloud hosted workflows. For details on using hosted workflows, consult the Vantage Cloud User Guide.

To use the Cloud Qualify action you must have a Telestream Cloud account and it must be registered in Vantage. In your account, you should create one or more Quality Control projects that can be executed by Cloud Qualify workflows in Vantage.



The Cloud Qualify action processes a media file (identified by nickname) in a Qualify project in your account, and returns a report and the result: A string variable with the results of the test.

Cloud Speech action

The *Cloud Speech action* submits media from Vantage workflows to Vantage Cloud for speech-to-text conversion. To use the Cloud Speech action you must have a Telestream Cloud account and enter the account credentials in the Vantage Management Console Settings to enable Vantage to access the account. When the Cloud Speech action executes, the input file is uploaded and processed according to the Cloud Timed Text Speech project chosen in the Cloud Speech action, and the results and status are returned to the on premises workflow. The Cloud Speech action is supported in Vantage Cloud hosted workflows. For details on using hosted workflows, consult the Vantage Cloud User Guide available on the Telestream web site.

Colocate action

The *Colocate action*, along with Chronicle, Compose, and Conform actions, are part of the optional, licensed Post Producer feature in Vantage. The Colocate action uses the Vantage Edit Service to ingest Composition XML files with references to nonfile-based URLS (for example, Amazon S3), localize the files, and convert the media references in a copy of the CML into paths to the localized files.

Common action

Common actions are implemented in multiple Vantage services (Catalog, Communicate, Staging, and Metadata) so they are not restricted to execution by a single service. See Receive action, Forward action, Decide action, Compute action, Construct action, Synchronize action.

ComponentPac

Vantage *ComponentPacs* are version-controlled Vantage components, such as an updated Capture action. ComponentPac versions are controlled using Telestream's Secure Version Control. For details, see the Secured Version Control application note on the Telestream web site.

Secured Version Control provides the ability to update Vantage—and create or update workflows that utilize new versions of actions—while keeping existing workflows untouched and operating using existing versions of actions. When you want to upgrade an action in a workflow, you can do so at a convenient time.

Vantage Communicate Service

The *Communicate Service* is the Vantage component that executes the actions relating to electronic messaging: Message action, and Notify action.

Compare action

A *Compare action* uses the Vantage Analysis Service to compare media files based on certain metrics (for example, PSNR). These metrics can generally be published as variables or as metadata labels.

Compose action

A *Compose action*, along with Chronicle, Colocate, and Conform actions, are part of the optional, licensed Post Producer feature in Vantage. The Compose action uses the Vantage Edit Service to convert various media descriptor file formats (Anystream AN2, Final Cut Interchange XML, Simplified Avid AAF, QuickTime Reference, Adobe FC7XML, and Telestream TSEDL) into a Composition XML file so that it can be used by the Conform action to compose media) into a Composition XML file so that it can be used by the Conform action to compose media.

Composition (CML) file

A *Composition file* is an XML schema that provides the vocabulary to describe media elements and their temporal and spatial relationships on a video timeline. Composition files (or Composition XML objects in a computer program) are submitted to a Conform action in a workflow to render the media file from the description.

Compute action

A *Compute action*, which is implemented in every Vantage service, performs various arithmetic and string manipulation functions, permitting you to create and modify values in variables, for use in downstream actions. This action is Open Workflow capable.

Conform action

A *Conform action*, along with the other Edit actions, are part of the optional, licensed Post Producer feature in Vantage. The Conform action, which is Vantage Cloud capable, uses the Vantage Edit Service to assemble and optionally transcode multiple video and still image files into a single output file, applying filters as specified by you. The input files and related specifications for the output file are all defined in a Composition XML file. This action is Open Workflow capable except when executing in Cloud mode.

Construct action

A *Construct action*, which is implemented in every Vantage service, enables you to construct complex strings, paths, and math expressions from literals, variables, and tokens, for use in downstream actions. This action is Open Workflow capable.

Copy action

A *Copy action* is executed by the Vantage Transport Service and is used to replicate a file from a source target (file system/device and directory) to a destination target (file system/device and directory). It typically performs this task by copying the file to the destination.

Copy actions can be executed on any action state. This action is Open Workflow capable.

database

The term *database* is the common term used to refer to the Vantage domain database, where all specifications for the domain are stored, along with workflows and job history.



Data Collection Utility

The *Data Collection Utility* is built into the Vantage Domain Console (Support Utilities > Data Collection). It enables you to collect relevant information about selected services for transmission to Telestream during a troubleshooting session. You can also log point-in-time details about a selected service into a log file for diagnostics purposes.

Delay action

The Delay action provides the ability to delay the workflow for a fixed number of seconds before continuing. The Delay action operates in Open Workflow mode; for example, if you set a 60 second delay, the action will turn green, delay 60 seconds, then propagate the Open signal to the next action.

Decide action

A *Decide action*, which is implemented in every Vantage service, is an action which allows you to explicitly set the action state based upon analysis of variable values at runtime. It is most commonly used to determine whether or not subsequent actions (or actions in a given branch) in a workflow should execute.

When the Decide action is used, the state set by the Decide action is passed to the next action. Typically, more than one Decide action is required to support decision branches. For example, if one branch is for HD media, it will start with a Decide action that will set the state to Success for HD content, or set it to Ignore otherwise; if another branch is for all other media, it will start with a Decide action that performs the opposite behavior.

See variable, action state.

Delete action

A *Delete action* is executed by the Vantage Transport Service, and 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 executed by the Vantage Transport Service, and is used to save the specified files to a destination outside the Vantage domain. Unlike Delete, Move, or Copy actions, Deploy actions allow multiple files to be operated on simultaneously, and do not maintain a reference to those files in the binder after completion.

distributed domain

Another term for Vantage array.

DIVA Archive action

The DIVA Archive action is part of the DIVA group in Workflow Designer. It is executed by the Vantage DIVA Service, and enables a workflow to add a new object to a specified DIVA installation.

DIVA Lookup action

The DIVA Lookup action is part of the DIVA group in Workflow Designer. It is executed by the Vantage DIVA Service, and enables a workflow to determine if a specific object has been archived in the specified DIVA installation.

DIVA Restore action

The DIVA Restore action is part of the DIVA group in Workflow Designer. It is executed by the Vantage DIVA Service, and enables a workflow to write content to a storage system external to DIVA and Vantage, that was previously archived in the specified DIVA installation.

domain

See Vantage domain.

DPP Validate Action

The DPP Validate action is executed by the Vantage Analysis Service. You can use the DPP Validate action to confirm compliance of a DPP metadata XML file. If the XML file passes validation, TRUE is generated; otherwise FALSE is generated. You can test the results of the action downstream to change the workflow's actions based on the validation results. Optionally, you can also generate a validation report. The DPP Validate action is supported in Vantage Cloud hosted workflows with the exception of the validation report option which is not supported. For details, consult the Vantage Cloud User Guide available on the Telestream web site.

DRM action

The DRM action is part of the Multiscreen group, and is executed by the Multiscreen Service. You use the DRM action to execute a script that utilizes input data and generates a JSON string. The string contains the information required to encrypt streaming media with DRM (digital rights management) in Multiscreen workflows.

Scripts are created externally in a supported language and added to a Vantage domain via the Vantage Management Console > Workflow Design Items > Scripts. The specified script is executed in the DRM action, generating the output into a text variable for use in a downstream Multiscreen action. Multiscreen Flip uses the output of the script when encoding the media.

Dublist action

A *Dublist action* is a specialized origin action for ingesting dublist files from a specified server and directory in TrafficManager applications. It uses the Vantage Monitor Service to regularly poll the server to discover new files.

When a new dublist file is discovered, it is parsed by the specified scheme and new entries are added to the master dublist maintained by Vantage. The Dublist action simultaneously polls the selected Vantage catalog for any media files which match entries in the master list; when found, it submits a job to a TrafficManager application workflow for processing. The Dublist action uses the binder name as the unique identifier for the commercial, so it should be set to the Ad ID.

Typically, the workflow is an on-air processing workflow which transcodes the media, optionally trims the clip and alters audio for compliance. Then, it delivers



the media to an on-air server and notifies an automation system. For more details, see the TrafficManager User Guide.

Dublist Portal

Dublist Portal is a client Windows program provided as part of a TrafficManager license. Dublist Portal enables customers who are performing advertisement processing to define, manage, and process dublists as part of their automated TrafficManager workflows.

Edit Decision List

A Vantage *edit decision list* (EDL) is a list of clips that will be merged together in a target clip. The list entries specify the start and stop of the clip, and Vantage supports list entries from multiple media files. Vantage operators use the Workflow Portal program to create EDLs.

Vantage Edit Service

The *Edit Service* executes the Playlist actions: Colocate action, Conform action, Chronicle action, and Compose action. In the case of Conform, the Edit Service may manage the rendering via an out-of-process resource.

emotion Action

The emotion action is an optional, licensed feature in Vantage. The emotion action enables Vantage to utilize and interact with Emotion Systems Emotion Engine audio software.

Error Log

The Error Log utility captures Vantage errors and records the following details: date and time of error, error source (Vantage service), host computer where the error occurred, type of error (Info or Error), and error message.

Examine action

An *Examine action* uses the Vantage Analysis Service to evaluate 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.

Exist action

An *Exist action* uses the Vantage Catalog Service, and allows you to determine if a binder of a given name (or name fragment) is present in a specified catalog.

Extract action

The Extract action, executed by the Vantage Metadata Service, is used to extract specific values from element attributes in XML or key-value pairs in JSON metadata. The Extract action identifies and extracts specific values from structured metadata and populates variables for use in downstream actions. The Extract action enables you to browse a sample file and identify the location in the structured data where the value is located.

The workflow can ingest an XML or JSON file during job execution or by making web service calls. The Extract action automatically generates XPATH or JSONPath

references from the structured metadata in these files to extract the data, and populates a variable with the value. During execution, each extraction path is evaluated against the input and the associated variables are populated for use in downstream actions.

This action is Open Workflow capable if the Open Workflows license is installed.

Faspex Delivery action

A *Faspex Delivery action*, which is executed by the Vantage Aspera Service, is used to deliver files to Aspera Faspex servers. Upon delivery, recipients are notified and can download the package.

Faspex 5 Delivery action

A *Faspex 5 Delivery action*, which is executed by the Vantage Aspera Service, is used to deliver files to Aspera Faspex 5 servers. Upon delivery, recipients are notified and can download the package.

FileCatalyst action

The *FileCatalyst action* is an optional, licensed feature, which enables Vantage workflows to access and deliver files to FileCatalyst servers via integrated FileCatalyst client software. It is executed by the Vantage FileCatalyst Service.

Vantage FileCatalyst Service

The *FileCatalyst Service* implements the FileCatalyst action for Vantage.

Flip action

A *Flip action* is executed by the Vantage Transcode Service, and implements the specified codec, which is used to transcode decoded digital baseband media into another media encoding format. The Telestream Media Transcode and Analysis Engine performs the transcode on behalf of Vantage. The Flip action has an Export command, which allows you to save the configured Flip action as an XML file, for use in SDK applications.

Flip64 action

The Flip64 action is a Vantage Cloud-capable, 64-bit multi-core-optimized encoder running under the Vantage Transcode Service (except in Cloud mode, when it is executed by the Telestream Cloud Service, operating as a proxy of Vantage Cloud). It transcodes media from one or more input files into another format as specified by the output configuration you specify. Available resolutions extend from SD to UltraHD and 4K in a broad range of file formats, from QuickTime to MPEG-4 and TIFO, and including encoding for x264, x265 (H.265 HEVC), MXF, and more. This action is Open Workflow capable except when executing in Cloud mode.

Forward action

A Forward action, which is implemented in every Vantage service, 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 have 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.

Frame.io action

The *Frame.io action* is implemented by the Vantage Publish Service and, via the Frame.io connector, allows for the creation and delivery of assets, between Vantage and Frame.io, an online hub that facilitates the organization of and collaboration around media assets. Frame.io allows team members to upload material, annotate this material, and collaborate with other team members on material. A special license is required to use this feature.

Gather action

A *Gather action* is implemented by the Vantage Staging Service, and collects one or more files from a specified server and directory (and optionally, its subfolders), and brings them into the workflow as attachments. Use of a file matching pattern allows you to select only certain types of files.

hosted workflows

A *hosted workflow* is a workflow that has been exported to Vantage Cloud after being designed in Workflow Designer. They are managed in the Vantage Cloud console after deployment in Vantage Cloud.

Jobs to hosted workflows are either submitted via the Telestream Cloud console or a Vantage Cloud API-based client program, and all action execution occurs exclusively in Vantage Cloud. For details on using hosted workflows, consult the Vantage Cloud User Guide available on the Telestream web site.

hot folder

A *hot folder* is 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. Also referred to as a Watch folder.

See Watch action, Vantage Monitor Service.

Identify action

An *ldentify action* uses the Vantage Analysis Service to determine certain properties of a media file, such as codec type, video bit rate, or file size. This information can then be published as a metadata labels or variables.

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 a Flip action.

IPTV Flip action

The *IPTV Flip action* is included with the Cable / IPTV version of TrafficManager. IPTV Flip actions are Cloud capable, and are executed by the Vantage IPTV VOD

Transcode Service except when operating in Cloud mode, when the Telestream Cloud Service executes it as a proxy for Vantage Cloud. IPTV Flip can optionally run on a Lightspeed Server for GPU-enhanced x264/x265 encoding and video processing. The IPTV Flip action and IPTV VOD Service supports the features required to handle varying IPTV, set-top box and cable encoding requirements, and ancillary metadata specific to cable ad splicing and cable/IPTV set-top box environments. This action is Open Workflow capable except when executing in Cloud mode.

Vantage IPTV VOD Transcode Service

The *IPTV VOD Transcode Service* is the Vantage component that executes the IPTV Flip action. This service (which can optionally run on a Lightspeed Server for H264 and HEVC encoding and video processing), supports the features required to handle varying IPTV, set-top box and cable encoding requirements, and ancillary metadata specific to cable ad splicing and cable/IPTV set-top box environments. Transcoding is performed by the Telestream Media Framework on behalf of Vantage. Rendering may be performed by an out-of-process resource managed by the IPTV VOD Transcode Service.

job

A *job* is each 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 a qualification rule.

Jobs for a given workflow can be viewed in the Vantage Workflow Designer by selecting the workflow in the Workflow Designer panel and displaying the Job Status tab. Alternatively, all in-process and failed jobs within a Vantage Domain may be viewed in the Status details panel of the Management Console.

job routing

See qualification rule and Run On rules.

job state

A *job state* is the current status of a job. Keyword values are In Process | Paused | Complete | Failed | Waiting | Stopped by User | Waiting to Retry.

Job Status Views Web Application

The Vantage Job Status Views web application is installed on a Vantage web server and enables you to view real-time information about jobs in the domain from anywhere on your network with a web browser.

label

A *label* or *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, or Ad-ID and other metadata values; this set of metadata is collectively called a Spot



metadata label. Metadata labels can be stored in binders with the associated media and attachment files.

Vantage supplies a set of default metadata labels for use in workflows. In addition, you can create and modify labels for your use using the Management Console (Workflow Design Items > Metadata Labels).

license

A Vantage *license* is stored in the Vantage domain database and enables one or more Vantage features within a Vantage domain. Licenses are delivered as XML files and imported into the database and activated via the Vantage Management Console.

Lightspeed Live Capture

Telestream's Lightspeed Live Capture is a scalable, multi-channel on-premise capture solution hosted on a Lightspeed Live Server for ingesting live, live linear or tape-based media directly into production, post-production and broadcast workflows. It is implemented in two web apps—Live Capture and Tape Capture.

Lightspeed Live Server

Telestream's Lightspeed Live Server is a 1RU, GPU-enabled, multi-core CPU server used to host Lightspeed Live Capture and other Live products.

Lightspeed Server

A Vantage *Lightspeed Server* is a 1RU, GPU-enabled, multi-core CPU server used to host Vantage services and accelerate video processing and x264 transcoding. Lightspeed Server accelerates compute-intensive image processing, including scaling, de-interlacing, frame rate conversion, motion vector calculation, and other tasks that require computation and analysis to modify or create new video frames.

Lightspeed Live Schedule Pro

Live Schedule Pro is a Windows service-based web application (Scheduling Live Capture Sessions); an optional, separately licensed feature offered as part of Lightspeed Live Capture. Live Schedule Pro enables you to create events you want captured for each source, and automatically starts and stops capturing video on an event-by-event basis, with optional SDI router control.

Lightspeed Live Play

Live Play is an optional, separately licensed product offered as part of Lightspeed Live Capture. The Live Play web app is an enterprise-class software solution that provides flexible and scalable SDI video playback on Telestream's Lightspeed Live Server. Live Play enables you to perform confidence monitoring of file-based and streaming media by playing it back on-screen and via SDI.

Listen action

The Listen action uses the Vantage Monitor Service to listen to a cloud-based message queue and generate jobs from received messages. The Listen action uses a plugin model for various cloud endpoints such as Amazon Simple Queue Service (SQS). The content of these messages could be very simple and contain a single value such as a file path or some sort of identifier to be used, or they could be more

complex such as a blob of json/xml to be processed by a downstream action such as Extract. The Listen action automatically deletes messages from the queue as it processes them. Any messages that are present in the queue when the Listen action starts up will be processed.

Location action

The *Location action* uses the Telestream Cloud Service to determine if a specified file is located in Cloud-native storage or in local storage with an optional, 24-hour signed URL for HTTPS access. This information is usually utilized in branching workflows which execute a given workflow branch based on the location of the file.

Lookup action

The Lookup action is part of the Metadata group and is executed by the Metadata Service. The Lookup action performs a search operation on a set of key-value pairs in a master CSV file, based on values extracted from the metadata file associated with a job submission. If the key is found, the value is returned in the output variable, for use downstream. Lookup is typically used with a Catch action workflow, in TrafficManager applications.

Vantage Management Console

The Vantage Management Console 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.

MediaInfo action

The *MediaInfo action*, which is executed by the Vantage Analysis Service, performs 2 tasks, based on its analysis of the media file and its streams:

- Creates variables from properties, using the MediaInfo API
- Creates a report of the properties and their values.

In each category, you can produce variables of selected metrics with the results the analysis.

Media Creation action

The Media Creation action uses the Vantage Avid Service to deliver new media to the specified Interplay server and issue the Interplay commands necessary to check the file into the Interplay server. This action is Open Workflow capable.

media nickname

A *media nickname* is an alias or alternate name that is assigned to a media file during Vantage workflow execution. When a media file is submitted to a workflow, the actual file name and location is stored in a Vantage <u>binder</u> along with a media nickname as defined in the workflow. Within the workflow, all references to a file are by media nickname. However, when Vantage needs to access a file, Vantage uses the actual file name and location stored in the binder.

See attachment nickname and nickname.

MediaMate action

A *MediaMate action* uses the Vantage MediaMate Service to enable Vantage workflows to utilize and interact with the Subtitling capabilities of Screen MediaMate. Each subtitling option provides different capabilities that relate to the subtitle process.

Vantage MediaMate Service

The *MediaMate Service* implements the MediaMate Screen software for Vantage, and provides two-way communication between workflows (and the MediaMate action) utilizing the MediaMate Screen software itself.

Message action

A *Message action* is implemented in the Vantage Communicate Service and enables you to generate and transmit an electronic Message—an email, for example. A Vantage administrator must configure Vantage to use an SMTP server (Vantage Management Console: Settings & Options > Email) before email can be utilized.

Vantage Metadata Service

The *Metadata Service* executes the actions the extract metadata values, and perform conversions between attachment files, metadata labels, and variables. Metadata Service actions include the Extract action, the Populate action, and the Transform action.

Vantage Metric Service

The *Metric Service* gathers and supplies machine-level information about a specific Vantage node. It monitors CPU, network, and RAM utilization and reports these to Vantage. On a Lightspeed server, it also monitors the GPU activity. The bulk of the information that the Metric Service presents is visualized in the Machine Metrics section of the Vantage Console. By convention, a Metric Service should be installed and running on every node in a Vantage domain. If you do not have a Metric Service running on a specific machine, then that machine will not appear (will not have an entry) in the Machine Metrics section of the Vantage Console.

Vantage Monitor Service

The *Monitor Service* is the Vantage component that executes Watch actions and Associate actions, Camera Ingest action, Workorder action, and Listen action all relating to the discovery of files and starting jobs.

Move action

A *Move action* is executed by the Vantage Transport Service, and 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 performs this task by copying the file to the destination, then deleting the source. The copy first, delete last process insures that the move completes normally before deleting the source file.

Move actions can be executed on any action state.

Multi-Decide action

The Multi-Decide action simplifies a Vantage workflow by allowing multiple phases of Boolean logic called Decision Groups to be implemented within a single action.

One Multi-Decide action can evaluate many different groups of variables and set a Result variable to represent the evaluation result for each group.

A key feature is that the Decide groups defined in the action can be chained together, similar to Compute and Construct actions, so that the Result variable of one group within the action can feed the input conditions of a subsequent group within the same action. This provides powerful internal logical processing within a single Multi-Decide action. The variable values resulting from a Multi-Decide action can trigger any of several branches in a workflow.

As an example, a Multi-Decide action can implement internal logic to trigger downstream workflow branches. For example, IF the video format is MXF AND the video frame rate is 60, THEN IF the bit rate is 35 MB/sec, execute branch 1; IF the bit rate is 50 MB/sec, execute Branch 2; otherwise, execute Branch 3. IF the video format is not MXF or the frame rate is not 60, execute Branch 4. The Multi-Decide greatly reduces the number of Decide actions required per workflow because many expressions can be grouped into a single action.

Multiscreen Flip action

The *Multiscreen Flip action* is an optional, licensed feature. Multiscreen Flip actions are Cloud actions; executed by the Vantage Multiscreen Service in Vantage or by the Telestream Cloud Service operating as a proxy, when executed in Vantage Cloud. The Multiscreen Service performs adaptive bit-rate encoding and simultaneous packaging of decoded digital baseband media into multiple bit-rate variants of H.264/HEVC video and containers in adaptive rate streaming formats, including Adobe HDS, Apple HLS, Microsoft HSS, and players the support MPEG DASH. You can configure the Multiscreen action to perform transcoding on a standard Vantage server or on a Lightspeed Server. This action is Open Workflow capable except when executing in Cloud mode.

Vantage Multiscreen Service

The *Multiscreen Service* is the Vantage component that executes the Multiscreen Flip action and the DRM action. This service (which can optionally run on a Lightspeed Server for H264 and HEVC encoding and video processing), supports the features required to handle varying adaptive bit-rate encoding and packaging requirements. Transcoding is performed by the Telestream Media Framework on behalf of Vantage. Rendering may be performed by an out-of-process resource managed by the Multiscreen Transcode Service.

Nexidia Action

The Nexidia action is an optional, licensed feature in Vantage. It uses the Vantage Nexidia Service to interact with Nexidia QC servers running Nexidia QC software. The specified input files are passed to the Nexidia QC software where they are analyzed using the test profile selected.

Vantage Nexidia Service

The *Nexidia Service* is an optional, licensed feature in Vantage. It executes Nexidia actions.



nickname

A nickname is an alias or alternate name that is assigned to a media or attachment file during Vantage workflow execution. When a media or attachment file is submitted to a workflow, the actual file name and location is stored in a Vantage binder along with a nickname as defined in the workflow. Within the workflow, all references to a file are by nickname. However, when Vantage needs to access a file, Vantage uses the actual file name and location stored in the binder.

Nicknames may refer to either media files or attachment files. Certain actions only allow the use of certain nickname types. For example, a Flip action only allows media file nicknames to be used as the inputs and outputs. However, other actions (such as the Move and Copy actions) operate on any type of file and allow the use of any nickname.

See attachment nickname and media nickname.

Notify action

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

TrafficManager-centric extensions are presented here for backward compatibility.

Open Workflows

An option to Vantage workflow functionality (enabled by the Open Workflows license), *Open Workflows* enhance the processing speed of workflows by enabling most actions to begin processing media before the previous action has completed its work. Open workflows only operate in Open mode when operating on Vantage domain nodes that are running on Windows in your local environment. They can not operate in Open mode when executing in Cloud mode.

origin action

An origin action is a specific type of action, which must be used to start a workflow. A workflow without an origin action as its first action is not properly designed, and cannot be activated. The origin actions include the Capture action, Watch action, Workorder action, and Receive action, as well as the Catch action and Dublist actions (optional TrafficManager actions).

Original nickname

The media nickname *Original* is a reserved nickname that is typically assigned to media files in a workflow by the origin action.

See media nickname.

Populate action

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

Post Producer

Post Producer is a specially-licensed set of actions and functionality in Vantage that enables iterative, template-driven assembly and encoding of assets for publication. Post Producer workflows automate assembly and reduce production costs by producing multi-layer video deliverables with transition and image effects, graphic overlays, and conformed for IPTV and cable VOD production, news or weather updates, international localization, promo assembly and insertion and advertisement insertion.

Vantage Publish Service

The Publish service implements the Frame.io actionand Stanza action in Vantage.

Pulsar Action

The *Pulsar action* is an optional, licensed feature which enables broadcasters to integrate the Pulsar suite of content verification components directly in Vantage workflows. It is executed by the Vantage Pulsar Service.

Vantage Pulsar Service

The Pulsar service implements the Pulsar action in Vantage.

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.

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> Services.

See also Run On rules.

Receive action

A *Receive action* is an origin action which is implemented in every Vantage service. Receive actions are designed to receive files from other systems: other Vantage workflows, API-based applications, and Workflow Portal, for example. Files can also be automatically submitted to a workflow starting with a Receive action from another workflow using the Forward action.

See Forward action.

Register action

A *Register action* uses the Vantage Catalog Service to add the binder created by each job to a Vantage catalog. Register actions can be executed on any action state.

See also Vantage catalog.

Remove action

A *Remove action* is executed by the Vantage Catalog Service, and is used to permanently remove a binder from the catalog and set the associated file resources to expired. If the action succeeds, it emits an action state of Success; otherwise, Failure.

Report action

A *Report action*, which is executed by the Vantage Analysis Service, generates a list of variables and their values and saves them in a file format specified by you.

resource cost

A *resource cost* 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.

retry rules

Retry rules are rules that you can specify on certain actions, to re-execute actions that fail primarily due to platform access and network latency problems. The retry rules you set on a given action override the default retry rules established in the Management Console.

Run On rules

Run On rules are rules that you specify on a given action, to qualify which services have the characteristics that enable them to execute this action. Rules are set up by specifying variables which have been bound to a given Vantage service and values set. After configuration, the action can test each rule by comparing its run time value to the value in the service's copy and determine if there is a match before attempting to execute it.

See also qualification rule.

Vantage SDK Service

The *SDK Service* is the Vantage component which enables integration with thirdparty or custom-developed client programs, for submitting jobs, tracking status, etc.

Session Log

The *session log* is a function of the Job Status and Domain Job Status panels in the Workflow Designer. This log displays session activity entries, if any, including which variables have been provided to each action and which ComponentPac was used to run an action. This information can be helpful when debugging the use of variable, or when working on an issue with Telestream Customer Service.

Signiant Delivery action

A *Signiant Delivery action*, which is executed by the Vantage Signiant Service, is used to deliver files to servers controlled by Signiant file transfer products.

Signiant Media Shuttle action

A Signiant media Shuttle action, which is executed by the Vantage Signiant Service, used for automated Media Shuttle accelerated file transfers among a specified list of users using Vantage workflows.

Vantage Signiant Service

The *Signiant Service* is the Vantage component which enables integration with third-party or custom-developed client programs, for submitting jobs, tracking status, etc.

The Signiant Service implements the Signiant file transfer product for Vantage, and provides two-way communication between workflows (along with the Signiant Delivery action and Signiant Media Shuttle action) utilizing the Signiant software itself.

Vantage Staging Service

The *Staging Service* is the Vantage component which executes Archive actions and Gather actions.

Stanza action

The Stanza action is part of the Publish group and is executed by the *Vantage Publish Service*. The Stanza action allows Vantage to create new projects within an installed server instance of Stanza. For more information on Stanza server installations and configurations, see the <u>Stanza</u> page on the Telestream web site.

service

See Vantage services.

Secured Version Control

The Secured Version Control feature provides the ability to install the latest software and begin building workflows that utilize new ComponentPac libraries (software libraries), while keeping the existing workflows untouched and operating off a previous ComponentPac version. When the user desires to upgrade a workflow or action within a workflow, it can be done at a convenient time. For a detailed description of Secured Version Control, search the Vantage Domain Management Guide.

Synchronize action

A Synchronize action is a connector action, for the sole purpose of uncluttering workflow connectors. In workflows where there is a many-to-many relationship (for example, 6 Flip actions connecting to 6 Deploy actions, which connect to 6 Deletes), instead of drawing connection between them all, you simply connect them to a common Synchronize action. There is no Inspector for the Synchronize action, because no configuration is required.



Syndicate action

The *Syndicate* action processes and can apply a template to metadata accompanying syndicated content from providers such as Pitchblue and generic providers. The Syndicate action is part of TrafficManager, an optional, licensed feature of Vantage, enabled with the TrafficManager license. It is executed by the Vantage Traffic Service. The purpose of this action is to automatically rearrange segments according to the template, or to mark specific segments as "not included" in the final program. Use the Syndicate action in syndicated media ingest workflows to convert sidecar metadata XML files to a mezzanine format for use in downstream actions in the workflow, or for use in Syndication Workflow Portal applications.

Syndication Forward action

The *Syndication Forward* action is part of TrafficManager, an optional, licensed feature of Vantage, enabled with the TrafficManager license. It is executed by the Vantage Traffic Service.

The Syndication Forward action processes incoming jobs from a traditional syndication source, such as a catch server, and allows for automatic forwarding of a CML file to a publishing workflow which performs segment extraction and processing. This removes the step of manual Workflow Portal interactions involving a typical Syndication action workflow in cases where an automated process is required or desired.

Tape action

The *Tape* action is an origin action (and may be the only action in a workflow) used to start SDI-based tape capture workflows created in any Vantage domain installed on the Lightspeed Live server. The Tape action inspector allows you to select and configure VTR sources for processing, filtering, transcoding, and output. You can also use the action to add metadata labels.

Vantage DIVA Service

The *DIVA Service* is the Vantage component that executes the DIVA Lookup | DIVA Restore | DIVA Archive actions, communicating with a target DIVA installatn as defined in the Vantage Management Console, via the DIVA REST API.

Telestream Live Source Service

The Telestream Live Source service manages the acquisition of material from a specific source (spawned by the Telestream Live Service).

Telestream Media Framework

The *Telestream Media Framework* is a software framework developed by Telestream for reading, writing transcoding, and analyzing many different kinds of media files. Telestream Media Framework is integrated in many Telestream products, including Vantage.

Telestream Playlist Service

The *Telestream Playlist Service* implements Telestream Live Play, which is used to play out files created by Live Capture.

Telestream Playlist Service is an optional, separately licensed feature. The Live Play web app provides on-screen and SDI-based real-time playback features based on custom playlists you create.

Telestream Schedule Service

The *Telestream Schedule Service* is an optional, separately licensed feature. It implements Live Schedule Pro, including Live Schedule Pro, a service-based web application. Live Schedule Pro works in conjunction with Live Capture, enabling you to create events you want captured for each source, and automatically starts and stops capturing video on an event-by-event basis.

Tempo action

The *Tempo action* is part of the Edit group executed by the Vantage Edit Service and is Cloud capable. When in Cloud mode, it is executed by the Telestream Cloud Service in Vantage Cloud. The Tempo action is included in Tempo, a time-adjusting encoding solution built on the Vantage platform. The Tempo action re-times filebased content and intelligently decreases or increases the running time of shows and segments. This action is Open Workflow capable.

Timed Text Conform action

The Timed Text Conform action is part of the Timed Text group and is Cloud capable. The Timed Text Conform action is executed by the Vantage Timed Text Service or via the Telestream Cloud Service when executed in Vantage Cloud. The Timed Text Conform action ingests a Timed Text CML file with references to caption/subtitle files in order to create SCC, MCC, or IMSC outputs.

Timed Text Flip action

The *Timed Text Flip action* is part of the Timed Text group and is Cloud capable. The Timed Text action is executed by the Vantage Timed Text Service, or by the Telestream Cloud Service operating as a proxy, when executed in Vantage Cloud. The Timed Text Flip action automates caption file-type conversions, extracts caption data from media with embedded captions, creates subtitle overlay graphics, and manipulates the timecode of caption data to match media.

Vantage Timed Text Service

The *Timed Text Service* is the Vantage component which executes the <u>Timed Text</u> Conform action or <u>Timed Text Flip action</u>.

Vantage Traffic Service

The *Traffic Service* is the Vantage component which executes the Catch action | Dublist action | Syndicate action.

TrafficManager

TrafficManager is an optional, licensed feature which enables automated advertisement and syndicated media processing from catch server to automation systems and on-air servers, serving both the broadcast and cable industry. It includes the Catch action for catch servers and the Dublist action for dublist management. It also includes the Syndicate action for processing syndicated media.



transcode

Transcode means the process of decoding media in one format (MPEG2, for example) down to digital baseband and then encoding it in another media format (MPEG4, for example).

Vantage Transcode Service

The *Transcode Service* is the Vantage component that executes the Flip action | Flip64 action —transforming media from one format to another. Transcoding for the Flip action is performed by the Telestream Media Transcode and Analysis Engine on behalf of Vantage. The remaining actions are performed within the Telestream Media Framework.

Transform action

A *Transform action* uses the Vantage Metadata Service to transform metadata between XML files (attachments) and labels. XSL style sheets are used to perform these transformations; style sheets can be managed in the Vantage Management Console: Workflow Design Items > Style Sheets. This action is Open Workflow capable.

Vantage Transport Service

The *Transport Service* is the Vantage component that executes (or manages the execution via an out-of-process resource) the actions relating to file operations: Move action, Delete action, Copy action, and Deploy action. File transfers may be performed by an out-of-process resource managed by the Transport Service.

Utilization action

A *Utilization action* enables users to determine the relative load on the domain as well as transcoding services within the domain. Other downstream actions can then make intelligent branching decisions based on that information: Vantage Cloud versus on-premises transcoding of media, for example.

Vantage array

A Vantage array is a Vantage domain whose software components are distributed among multiple computers for durability and scalability, instead of installed and operating on a single computer (often referred to as a distributed domain). A typical array has the Vantage domain database installed on a dedicated server, and all Vantage services installed on another computer, and additional Transcode Services each installed on other computers for high-performance, parallel transcoding.

Vantage catalog

Formal name for catalog. Similar in concept to the folders in a file system, a Vantage *catalog* is a container that stores binders. *Catalog folders* are sub-containers that organize binders. To access a binder, Workflow Portal operators search through the visible catalogs and folders, just as they might sort through folders in a file system.

Vantage domain database

A Vantage domain 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 set of computers, Vantage workflows, actions, Vantage services, jobs, binders, and configuration settings, all known to and interacting with each other, stored in a 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.

The name of a Vantage domain is the same as the name of the server that hosts the Vantage domain database.

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 EDL nickname

The nickname *Vantage EDL* is a reserved nickname that is typically assigned to media files that are created in catalog ingest workflows, to identify the ingest files of an Edit Decision List in Workflow Portal, during Stitch and Trim operations. See media nickname.

Vantage folder address

A *Vantage folder address* is an alias to a local or remote file folder. You can create and manage Vantage folder addresses in the Vantage Folder Address Book dialog, in Copy and Move actions in Vantage Workflow Designer, and in the Vantage Management Console.

After you create a Vantage folder address, you can specify the destination directory in any workflow simply by selecting the Vantage folder address. Changes to a Vantage folder address—such as updating an IP address or a password immediately affect all workflows that use that Vantage folder.

Unlike Vantage stores, temporary files that are created during workflow execution are not automatically deleted from Vantage folders according to job expiration settings.

Vantage Live Service

Part of the Vantage Media Processing Platform on a Lightspeed Live Server, the Vantage Live Service is listed in the Management Console Services list and executes the Capture action processes.

Vantage Proxy nickname

The media nickname *Vantage Proxy* is a reserved nickname that may be assigned to media files encoded using the QuickTime encoder in H.264/AAC as QuickTime



movies or MP4 files with x264/AAC, which enables previewing with the media viewers provided in Vantage programs such as Workflow Designer, Workflow Portal, and the Vantage Management Console.

Alternatively, the Workflow Portal Windows Client QuickTime Media Player supports MP4 with x264-encoded H.264/AAC, provided that QuickTime 7.7.6 or later is installed.

See media nickname.

Vantage services

The term *Vantage services* refers to the collection of Windows services in a Vantage domain, which are responsible for executing all of the actions in a workflow as it executes.

Vantage store

A *Vantage store* is a directory on a Windows file system that stores 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, temporary files placed in a Vantage store are deleted when the <u>binder</u> 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: Storage. Services that create temporary files, such as the Transcode Service, can be configured to use specific stores.

Vantage Thumbnail nickname

The media nickname *Vantage Thumbnail* is a reserved nickname that is typically assigned to output media files that are created to display thumbnail images instead of binder names in Vantage programs such as Workflow Portal.

See media nickname.

variable

In Vantage, a *variable* is a container for temporary job information—a symbolic name (or identifier) which contains some known or unknown quantity or element of information; a value. You use the variable name to reference the current value; this separation of name and content allows the name to be used independently of the exact information it represents. The variable can be bound to a value (that is, you can set a variable to a given value) during run time, and the value of the variable may change during the course of workflow execution.

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 (such as *50*). 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 workflow execution. Many settings in actions can be bound (or attached) to variables, allowing the workflow to dynamically update values 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 boolean variable named *hostnameRequired* set to TRUE 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 Vantage Management Console (Workflow Design Items > Variables) or in Vantage Workflow Designer, and assigned for use in workflows and services.

VidChecker action

A *VidChecker action* is an optional, licensed feature in Vantage. It uses the VidChecker Service to enable Vantage workflows to utilize and interact with various QC tests provided by the VidChecker software.

VidChecker Service

The *VidChecker Service* implements the VidChecker QC software for Vantage, and provides two-way communication between workflows (and the VidChecker action) utilizing the VidChecker software to perform media quality tests.

Watch action

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

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* is an optional, licensed web app which displays important domain information from anywhere on your network in a web browser. The Web Dashboard is installed on the IIS server on your Vantage domain database server.

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 domain database, and executed by Vantage services.

Workflow Designer

Vantage Workflow Designer is a client program that enables you to create and edit workflows, activate and deactivate workflows, monitor job status, and review and delete jobs that have completed.

Workflow Portal

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, forwarding jobs, creating EDL-based 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 Workflow Portal, they select the configuration appropriate to the task at hand, and Workflow Portal dynamically display the user interface components specified in the configuration file.

Workflow Portal Web Application

The Workflow Portal web app is a limited implementation of Workflow Portal, for use in a web browser over a network or Internet connection.

Workorder action

A Workorder action is an origin action; it uses the Vantage Monitor Service to regularly poll a target Windows directory for new workorder files to process. The Workorder action provides a simple and highly effective method of submitting multiple similar jobs without using the SDK.

When a new file is discovered, the Workorder action submits one job for each row in the file.

workorder file

A *workorder file* is a comma-separated value (CSV) text file containing one or more work orders, or job descriptions. Each row in the CSV file specifies a job, and each column specifies either an input file for the job, or value for run-time use; typically assigned to a variable in the workflow. Workorder file configurations are specified in the Vantage Management Console. At least one workorder scheme must be created in order to use a Workorder action.

