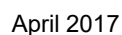




**This App Note
applies to
Vantage
Version 7.0, 7.0 UP1,
7.0 UP2,
& later**

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Note: This guide is written for video professionals who are familiar with using Vantage. To implement applications in Vantage, you should know how to create workflows and submit jobs. If you aren't familiar with Vantage, we suggest that you review the *Vantage User's Guide* and *Vantage Domain Management Guide* as needed.



Introduction

The Teletrax system uses an imperceptible watermark in a piece of video content to monitor when and where that content is broadcast. Teletrax monitors over 1900 terrestrial, satellite and cable channels worldwide and records and logs any Teletrax watermarks detected on those channels. Teletrax subscribers can gain access to information about when and where their content was broadcast from the Teletrax database.

Vantage can be used with the Teletrax system to automate several key parts of the Teletrax workflow. Using Vantage you can do the following:

- Enter descriptive metadata for an asset.
- Add a watermark to an asset as part of a Transcode process.
- Submit metadata about the watermarked asset to the Teletrax system, so that information about the asset will be logged.

Telestream does not resell the Teletrax watermarking capability.

- A license to enable Teletrax watermarking must be obtained from directly from the owner/distributor, 4C at <http://www.4cinsights.com/teletrax/>.

Note: Teletrax was formerly owned by Civolution but is now owned by 4C.

- In addition a Teletrax connector license for Vantage must be purchased from Telestream.

These licenses enable the Teletrax watermarking capability to be used from within Vantage. The Vantage Teletrax connector license allows up to four Teletrax watermarking jobs to run on a Vantage array at any one time. Additional connectors must be purchased to allow more than four jobs to run at one time (two connectors allow up to eight jobs, etc.).

Both Telestream and 4C can provide temporary licenses for test and evaluation.

Please contact 4C at <http://www.4cinsights.com/teletrax/> to enquire about purchasing or evaluating Teletrax licenses for Vantage.

Please contact sales@telestream.net to enquire about purchasing or evaluating Vantage Teletrax Connector licenses.

Setting up a Vantage System to Perform Teletrax Watermarking

While the software that actually performs the video watermarking for Teletrax is built into Vantage, a configuration file and a license file have to be provided by 4C first in order in order to configure Teletrax with the Vantage system. These files are named:

- TTX_WatercastProp.cfg
- TeletraxBasebandSDK.lic

In order to prepare the TTX_WatercastProp.cfg file, 4C will need some information regarding the location of the Teletrax shared database. The Teletrax shared database is a file that is created and used by the Teletrax watermarking software when it is run. In size, the database will not grow to more than 100Kb. The location of the database is embedded in the TTX_WatercastProp.cfg. You will need to inform 4C of the UNC path where the database will be created, including the database file name.

The path that the cfg file needs to include looks like this:

```
"Checksum": "76782865",  
"ContentProcessor": {  
  "Version": "0.1",  
  "Facility": "Civolution",  
  "SharedDatabase": "C:\\Civolution\\shareddatabase",  
  "Detector": {  
    "VWM": {  
      "Enabled": true,  
      "DisplayAllWatermarks": false,  
      "DisplayEIDS": [
```

In this example the name of the database file that Teletrax will create is, "shareddatabase" with no extension. This path must exist before you run a watermarking job.

Note: When setting up the system, ensure that the "C:\\Civolution" path exists before you run the cfg file, but do not manually create the "shareddatabase" folder or the cfg will fail with no indication of the failure. Let the cfg create the "shareddatabase" folder automatically for you.

In a Vantage array installation where Teletrax watermarking will take place on more than one machine, the Teletrax shared database will be accessed by all of the machines performing watermarking and the UNC path to the database should be the same on each machine.

Once you have obtained these files from 4C they should be copied to the following folders of the Vantage install path on all of the Transcode machines performing watermarking.

File	Location
TTX_WatercastProp.cfg	\Transcode\bin\Cfg
TeletraxBasebandSDK.lic	\Transcode\bin\

Note: The default Vantage install path is C:\Program Files (x86)\Telestream, but it can be changed at the time Vantage is installed.

In the \Transcode\bin folder in the install path of every machine performing watermarking, create a subfolder called \Encodation.

In addition to having the Teletrax License file, you also need to obtain a Vantage connector license from Telestream. This is a normal Vantage license; if you purchased a Teletrax connector license at the time that you purchased your Vantage system, the connector license will be included in the main Vantage license file you received to fulfill your purchase. If you purchased the connector as an add-on to an existing system, then you will receive a supplementary license file that can be installed on your system. See the Vantage User Guide for more information on installing Vantage licenses.

Configuration Checklist:

1. Obtain and install a Vantage Teletrax Connector license.
2. Obtain License and cfg file from 4C.
3. Ensure that the shared database path is known and exists.
4. For each Machine that you want to run watermarking transcode jobs on:
 - a. Place TTX_WatercastProp.cfg in \Transcode\bin\Cfg.
 - b. Place TeletraxBasebandSDK.lic in \Transcode\bin\
 - c. Create the \Transcode\Bin\Encodation folder
 - d. Restart the Vantage transcode service (or reboot the machine).

Building a Teletrax Workflow in Vantage

The following topics explain required licensing and present an example Vantage workflow for Teletrax.

License Prerequisites

The following Vantage licenses are required in order to make use of Teletrax in Vantage:

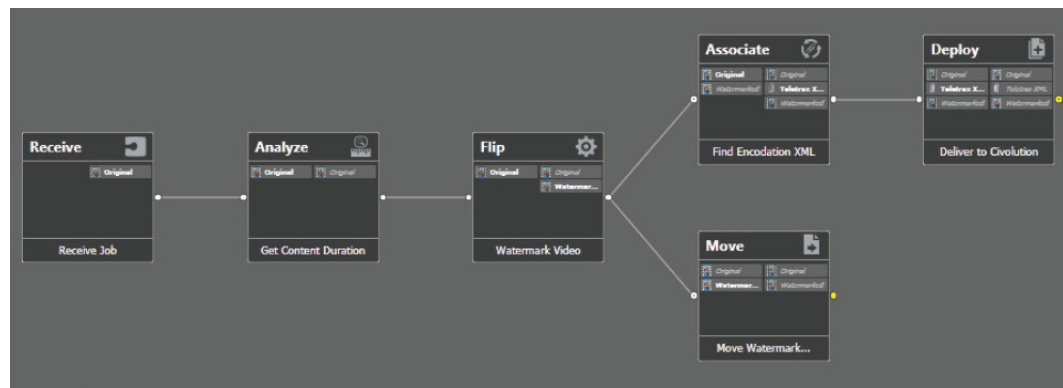
- Vantage Transcode or Vantage Transcode Pro
- Vantage Teletrax connector.

The following additional licenses may be required to build a fully functional Teletrax implementation:

- Vantage Analysis
- Vantage Workflow Portal

Teletrax Workflow

In this section a Vantage workflow for Teletrax Watermarking is described. Familiarity with the fundamental aspects of building Vantage workflows, such as variable bindings, is assumed.



Receive – It is assumed for the purposes of this description that files are submitted to the workflow from the Vantage workflow portal. So a receive action is used as the origin action.

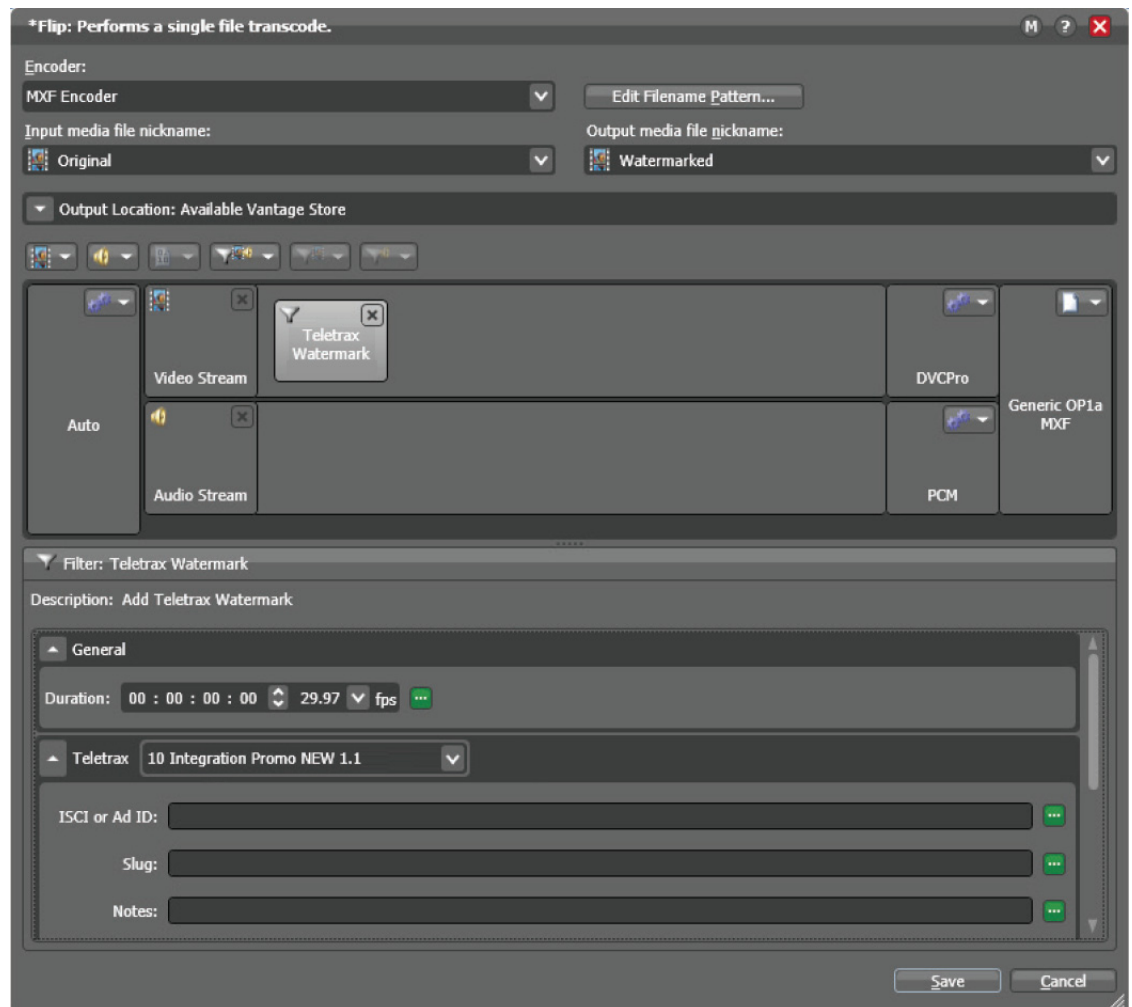
Analyze – The Teletrax watermark filter needs to be provided with the duration of the piece of content to be watermarked. The Analyze action publishes a content duration variable, using the Media Properties tool. This duration variable will be bound to the Duration parameter in the Teletrax Watermark Filter in the downstream Flip action.

Note: Use of Analysis is not a firm requirement for a Teletrax workflow. Other methods could be used to provide the Teletrax Watermark Filter with the duration of the content.

Flip – The Flip action transcodes the source file and adds the Teletrax watermark to the video. The Teletrax Watermark video Filter is used to embed the watermark. This filter is available when the Legacy, Multicore or Lightspeed video processor is selected. The filter is not available in the Tachyon video processor.

The filter configuration UI is shown. The duration control should be bound to a variable that provides the duration of the content you wish to watermark. In this example the duration is provided by the Vantage Analysis tools. It could also be provided by an external system (such as an asset management system) via a Vantage API submission. In a situation where all content submitted has the same duration, this value could be hard coded in the interface rather than bound to a variable.

All of the other fields in the filter configuration UI are string type variables. They should be bound to variables that will contain the required metadata related to the content being watermarking. These variables could be provided by manual entry in a correctly configured Vantage portal, or by an external system (such as an asset management system) via an API submission.



Move – Moves the watermarked asset to wherever it needs to go for broadcast.

Associate – Picks up the Teletrax XML that was generated in the \Transcode\bin\encodation subfolder and turns it into an attachment in the Vantage binder.

Deploy – The deploy action takes the Teletrax XML attachment and transfers it via FTP to the Teletrax system. FTP details and login credentials are provided by 4C.

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