Vantage
Media Processing Platform

Domain
Reporting & Analytics

Solution Brief: Vantage Reporting & Analytics

The Vantage Reporting & Analytics option is an immensely valuable compliment to a Vantage system that allows domain administrators and users the ability to gather performance and utilization data for Vantage domains and workflows.

Overview

Once a Vantage domain is up and running, we recommend performing analysis and reporting on the domain, services, and workflows, to ensure the Vantage system runs at its peak performance.

With Vantage Reporting & Analytics you can:

- Perform capacity analysis on your Vantage domain
- View domain performance statistics; cumulative and average execution times for workflows and actions
- Compare Service utilization through an entire 24 hour or other time period
- Identify slowest performing workflows and bottlenecks
- View number of jobs run and their completion status
- Automatically generate reports when workflows complete
- Create custom reports for specific analysis

Analytics

Analytics within Vantage are snapshots of compiled data that indicate the performance of Workflows and Actions. Workflow analysis capabilities include the ability to quickly see the bottleneck of a workflow and the average time a workflow takes to complete.

In the following Bottleneck Analysis diagram, you can easily see that the Flip action was the bottleneck and took an average of 1 minute and 19 seconds to complete. This analysis can be run on a single workflow or averaged over multiple workflows.

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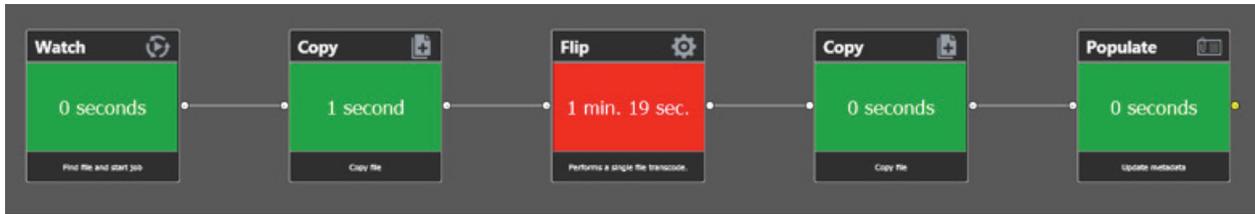
Action Analytics enable you to quickly see which Actions are taking the longest time to complete. In the example below, the Copy Action takes an average of 53 minutes and 56 seconds. With this information, you might consider moving to a higher performance disk subsystem or providing multiple disk drives to improve the speed of the Copy Action.

Action Analytics

Based on 98 jobs

| Action Name	Action Description	Average Execution Time ▼	Workflow
Copy	Localize	53 min. 56 sec.	Simple Benchmark Workflow [CLOSED]
Flip	Performs a single file transcode.	11 min. 21 sec.	Simple Benchmark Open and Closed
Flip	Performs a single file transcode.	9 min. 36 sec.	Benchmark Open and Closed NonLightspeed
Flip	Performs a single file transcode.	9 min. 33 sec.	Benchmark Open and Closed NonLightspeed
Flip	MPEG-2 PS	8 min. 21 sec.	Simple Benchmark Workflow [CLOSED]
Flip	Performs a single file transcode.	8 min. 4 sec.	Test
Flip	MPEG-2 PS	7 min. 35 sec.	Simple Benchmark Workflow [OPEN]
Flip	Performs a single file transcode.	6 min. 38 sec.	Simple Benchmark Open and Closed
Flip	Performs a single file transcode.	5 min. 4 sec.	Test 4
Flip	Performs a single file transcode.	4 min. 9 sec.	Test 3
Copy	Copy file	2 min. 53 sec.	Test
Copy	Copy file	2 min. 36 sec.	Test 3
Copy	Copy file	2 min. 11 sec.	Benchmark Open and Closed NonLightspeed
Copy	Copy file	2 min. 11 sec.	Benchmark Open and Closed NonLightspeed
Copy	Copy file	1 min. 49 sec.	Simple Benchmark Workflow [OPEN]
Copy	Delivery	1 min. 39 sec.	Simple Benchmark Workflow [OPEN]
Copy	Copy file	1 min. 16 sec.	Benchmark Open and Closed NonLightspeed
Copy	Copy file	1 min. 1 sec.	Simple Benchmark Open and Closed

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Workflow analysis can be performed on all jobs in a domain as well. You may want to see the jobs that took the longest time to complete. In the diagram below, you can see that the "Simple Benchmark Workflow [CLOSED]" has processed a total of 22 jobs with an Average Completion Time of 57 minutes and 1 second. And within this workflow, the bottleneck was the Copy Action with an Average Execution time of 53 minutes 56 seconds. An analysis conclusion could be drawn to further investigate the performance of the storage system or network infrastructure.

Workflow Analytics

Based on 98 jobs

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
Simple Benchmark Workflow [CLOSED]	22	20 hours 54 min....	57 min. 1 sec.	20 hours 28 min....	22 min. 45 sec.	53 min. 56 sec.	Copy	Localize
Test	7	58 min. 6 sec.	8 min. 18 sec.	1 hour 10 min. 2...	2 min. 42 sec.	8 min. 4 sec.	Flip	Performs a single file tr...
Benchmark Open and Closed NonLightspeed	12	1 hour 36 min. 1...	8 min. 1 sec.	2 hours 44 min....	3 min. 2 sec.	9 min. 36 sec.	Flip	Performs a single file tr...
Test 4	7	38 min. 8 sec.	5 min. 26 sec.	33 min. 20 sec.	1 min. 4 sec.	5 min. 4 sec.	Flip	Performs a single file tr...
Simple Benchmark Open and Closed	8	41 min. 19 sec.	5 min. 9 sec.	1 hour 52 sec.	2 min. 10 sec.	11 min. 21 sec.	Flip	Performs a single file tr...
Test 3	9	38 min. 4 sec.	4 min. 13 sec.	58 min. 43 sec.	1 min. 28 sec.	4 min. 9 sec.	Flip	Performs a single file tr...
Test 2	9	1 min. 7 sec.	7 seconds	43 seconds	0 seconds	4 seconds	Flip	Performs a single file tr...
Decision	9	1 min. 1 sec.	6 seconds	32 seconds	1 second	4 seconds	Analyze	An action that can perf...

Reporting

Vantage Reporting enables you to generate Job Reports or Service Reports. These reports provide information on the performance of individual jobs or Vantage services. The report format is a text file or .CSV file that is compatible with Microsoft Excel and Google Docs.

Job Reports can be generated manually or automatically. In the screen below, the Elapsed Time report is being selected that generates a report showing the elapsed time of the job. If a Notify Action is added to the end of the workflow below, the Elapsed Time job report would automatically be generated every time the workflow is run. Additionally, each job run from this workflow appends to the report, providing a comprehensive view of the workflow performance over time.
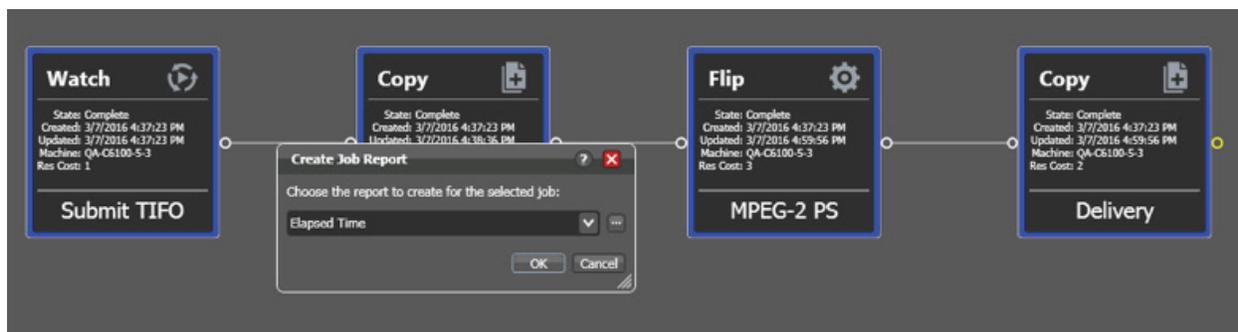
Service Reports provide reporting on a Vantage Service. In the diagram on the next page, a report is to be run on the Transcode and Transport Services. The output generated in the spreadsheet shows that Transport utilization only occurs between the hours of 10am and 4pm. This highlights that the Transport Service within the Vantage domain is currently under-utilized and submitting jobs outside of these hours would increase the Transport Service utilization. Additionally, since the utilization is below 50%, additional jobs can even be submitted between these hours.

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Report contents can also include user definable data collected from metadata. This data ranges from simple data like job elapsed times, to custom content such as codec type, loudness levels and closed caption presence.   If needed, Telestream's professional service team can be engaged to assist you in building workflows that support the creation of customized reports for your Vantage domain.

Vantage provides the most comprehensive set of tools to streamline your operations. Vantage Reporting & Analytics are key components that ensure your Vantage system runs at peak performance.

Requirements

A license is required for Vantage Reporting & Analytics. This license enables the Reporting & Analytics feature to operate across the entire domain of the Vantage system.