Telestream

Analytics App

User Guide

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Contents

Telestream Contact Information

To obtain product information, technical support, or provide comments on this guide, contact us using our web site, email, or phone number as listed below.

Resource	Contact Information
DIVA Core Technical Support	Web Site: https://www.telestream.net/telestream-support/diva/support.htm Depending on the problem severity, we will respond to your request within 24 business hours. For P1, we will respond within 1 hour. Please see the Maintenance & Support Guide for these definitions. • Support hours for customers are Monday - Friday, 7am - 6pm local time. • P1 issues for customers are 24/7.
Telestream, LLC	Web Site: www.telestream.net Sales and Marketing Email: info@telestream.net Telestream, LLC 848 Gold Flat Road, Suite 1 Nevada City, CA USA 95959
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Preface

This book describes installation, configuration, and operation of the Analytics App system. This document is intended for the Telestream Installation Team, System Administrators, and system users.

Topics

Documentation Accessibility

For information about Telestream's commitment to accessibility, visit the Telestream Support Portal located at:

https://www.telestream.net/telestream-support/diva/support.htm

Access to Telestream Support

Telestream customers that have purchased support have access to electronic support through the Telestream Support Portal located at:

https://www.telestream.net/telestream-support/diva/support.htm

Related Documents

For more information, see the DIVA Core documentation set for this release located at:

https://www.telestream.net/telestream-support/diva/support.htm

For information on Oracle Storage Cloud visit the following links.

For information regarding metered and non-metered accounts:
http://docs.oracle.com/en/cloud/get-started/subscriptions-cloud/csgsg/

For up to date Cloud information:
http://docs.oracle.com/cloud/latest/

For further assistance:
http://docs.oracle.com/cloud/latest/storagecs_common/index.html

Document Updates

The following table identifies updates made to this document.

Date	Update
May 2022	Updated Copyright information. Updated book for release 8.2. Migrated book to Telestream format Updated terminology to new standards (see the *Overview* for updated terms)
June 2022	Fixed footnote errors.
August 2022	Minor terminology updates.
September 2022	Minor formatting corrections. Updated terminology and title page graphic. Updated book for 8.3 release.
October 2022	Reverted the term “Virtual Object” to “Object”
December 2022	Updated book for 8.3.1 release.

Overview

This chapter describes an overview of the Analytics App, new and enhanced features and functionality, and includes the following information:

Topics

Analytics App Overview

The Analytics App is a DIVA Core option that constantly monitors the digital storage infrastructure, and warns about media or tape drive degradation before it results in reduced performance or possible data loss. The Analytics App provides long term content protection, management, and security to DIVA Core.

The Analytics App features include:

- Continuous monitoring of tape drives and media
- Complete history of drive and media performance
- Full integration with DIVA Core
- Detailed Performance Analysis
- Preventive and corrective maintenance aid
- System Journal
- System Metrics

The Analytics App gives you information regarding current and past performance numbers for various system components. You can use the information to project present and future system requirements based on various premises, and plan for appropriate system evolutions.

The Analytics App collects quality and performance data in real time within the archive environment. You can use the information as an aid for selective migration of content, recycling of defective media, preventative hardware maintenance, network and storage system integrity, and content availability.

The Analytics App performs the following tasks:

- Gather operational facts from the following sources:
  - DIVA Core System (software components and equipment)
  - Platforms (servers and operating system)
  - Exchanged Data
- Process operational facts into metrics by sampling, filtering, normalizing, counting, and aggregating data.
- Maintain a view of the system's current and past performance.
- Collect and verify checksum data to expose disk and tape errors, and report Disk, Tape, and Server failures.
- Assist in managing large volumes of data.
- Provide billing data for customers offering DIVA Core as a service to other customers.
- Predict operational conditions of interest (for example, end of life of a tape or a drive).
- Provide low-level diagnostic information to assist support staff investigations.

- Answer a broad range of questions about:
  - Optimal performance (what can the system deliver in an optimal context?).
  - Current performance (is the system performing at its best?).
- Causes of the current state. That is, what led to the current state. For example, how did so many tapes get consumed in the last month?
- History (for example, evolution of the capacity, throughput, activity, and so on).
- Possible solutions or adjustments (for example, what needs fixing or relocation, what should be replaced, what should be reconfigured, and so on).
- What If scenarios (that is, what is the impact of a proposed change in the system, capacity planning, and so on).
- Use of the system at various levels (DIVA Core system, DIVA Core component, job type, tape, library, tape drive, disk, Collection, and so on) as a basis for billing (that is, who, what, when, how much, how many, how long).

Analytics App Principles of Operation

The primary purpose of the Analytics App is to collect operational data generated by activity in the archive system (Archive, Restore, Copy, Insert Tapes, and so on). Each activity generates events, for example, a TAPE READ or a DELETE INSTANCE. Events are collected in real time and stored in the database.

Each event has various information attached to it. For example, the size of a transfer, its duration, the Actor used, and so on. These are referred to as Event Parameters.

Metrics are generated and updated by processing event parameters using background jobs scheduled every hour. You can break down (AGGREGATE) event data according to various resources or attributes (for example, object name, tape barcode, storage device, and so on), and per hour, day, week, month, or year interval. You can also use no interval to collect a lifetime metric. Various aggregation functions are provided; for example, Count, Sum, and Average.

For example, the TAPE_DRIVE_READ_WRITE_DAY built-in metric sums the transfer sizes of TAPE READ and TAPE WRITE events and breaks down the values per device, and per day.

The Analytics App supports additional data retrieval such as DIVA Core Resource Statistics and Quick Response Data (QRD), detailed in the *Collecting Quick Response Data (QRD)* section. This data is processed separately and is not available in Metric Definitions.

New Terminology

The following terminology has been updated to reflect standardization efforts across all DIVA and Kumulate applications. There will be some variations in the documentation compared to the interface until everything is switched over to the new terminology; the documentation uses the new terms wherever possible.

Note: DIVA Command has been deprecated.

- Running Requests are now called Jobs
- Request History is now called Job History
- Libraries are now called Managed Storage
- Datahub is now called Actor
- Proxyhub is now called Proxy Actor
- DIVA Core and DIVA Manager are now called DIVA Core / Core / Core Manager
- Category is now called Collection
- Source/Destination is now called Unmanaged Storage Repository
- Storage Repository is now called Managed Storage Repository
- Group is now called Tape Group
- Link is now called Storage Link
- Storage Plan Manager is now called Storage Policy Manager
- Drop Folder Monitor (DFM) is now called Watch Folder Monitor (WFM)
- DIVA Configuration Utility and Control Panel are now called System Management App
- DIVA Analytics and DIVAProtect are now called Analytics App

New and Enhanced Features and Functionality

This section describes new and enhanced features and functionality. These changes became effective in the DIVA Core 7.5 release; there are no additional updates in the DIVA Core 8.3 release.

Events

The Analytics App Archive, Copy, Copy As, Restore, and Partial File Restore job events will populate the Transfer Size and Duration fields.

The ANALYZE_END and ANALYZE_ERR events were removed from the predefined Analytics App events.

Metrics

To standardize the Metric ID across all DIVA Core installations, all predefined metrics have a hard-coded Metric ID instead of using a database sequence. All user defined metrics start with Metric ID 1001. The database upgrade scripts handle this migration for you during upgrades from DIVA Core 7.4 to release 8.0. If you already had any user-defined metrics, they are automatically assigned a new Metric ID starting with 1001.

The following pre-defined metrics were remove in DIVA Core 7.5. However, there is no impact for earlier releases and customers currently using them; those metrics will continue to exist, update, and are not removed during the upgrade process to the 8.0 release. This only affects new installations of DIVA Core 7.6 and later.

- ANALYZE_NUMBER_DAY
- ANALYZE_NUMBER
- ANALYZE_ABORTED_NUMBER_DAY
- ANALYZE_ABORTED_NUMBER
- ANALYZE_DATA_DAY
- ANALYZE_DATA
- ANALYZE_AVG_THROUGHPUT_DAY
- ANALYZE_AVG_THROUGHPUT
- ANALYZE_MIN_THROUGHPUT_DAY
- ANALYZE_MIN_THROUGHPUT
- ANALYZE_MAX_THROUGHPUT_DAY
- ANALYZE_MAX_THROUGHPUT
- ANALYZE_TIME_DAY
- ANALYZE_TIME
- MEDIA_OBJECT_INSTANCE_CREATE_DELETE_DAY
- MEDIA_OBJECT_INSTANCE_CREATE_DELETE

New Predefined Metrics

The following predefined metrics were added in the DIVA Core 7.5 release. See Metric Definitions for a complete list.

- ACTOR_READ_WRITE_MONTH
- ACTOR_READ_WRITE_NUMBER_MONTH
- ACTOR_TIME_ALL_OPERATION_MONTH
- ACTOR_TIME_READ_MONTH
- ACTOR_TIME_WRITE_MONTH
- DISK_AVG_TRANSFER_RATE_READ_MONTH
- DISK_AVG_TRANSFER_RATE_WRITE_MONTH
- DISK_CHECKSUM_FAILURE_COUNT_MONTH
- DISK_NUMBER_READ_ABORTED_MONTH
- DISK_NUMBER_READ_MONTH
- DISK_NUMBER_WRITE_ABORTED_MONTH
- DISK_NUMBER_WRITE_MONTH
- DISK_READ_MONTH
- DISK_TIME_ALL_OPERATION_MONTH
- DISK_TIME_READ_MONTH
- DISK_TIME_WRITE_MONTH
- DISK_WRITE_MONTH
- DIVA_CORE_SYSTEM_ACTIVE_ARCHIVE_NUMBER_MONTH
- DIVA_CORE_SYSTEM_ACTIVE_COPY_AS_NUMBER_MONTH
- DIVA_CORE_SYSTEM_ACTIVE_COPY_NUMBER_MONTH
- DIVA_CORE_SYSTEM_ACTIVE_RESTORE_NUMBER_MONTH
- DIVA_CORE_SYSTEM_AVG_READ_WRITE_NUMBER_MONTH
- DIVA_CORE_SYSTEM_NUMBER_OBJECT_ARCHIVE_MONTH
- DIVA_CORE_SYSTEM_NUMBER_OBJECT_CREATED_MONTH
- DIVA_CORE_SYSTEM_NUMBER_OBJECT_DELETED_MONTH
- DIVA_CORE_SYSTEM_NUMBER_OBJECT_INSTANCE_COPY_MONTH
- DIVA_CORE_SYSTEM_NUMBER_OBJECT_INSTANCE_CREATED_MONTH
- DIVA_CORE_SYSTEM_NUMBER_OBJECT_INSTANCE_DELETED_MONTH
- DIVA_CORE_SYSTEM_NUMBER_OBJECT_RESTORE_MONTH
- DIVA_CORE_SYSTEM_OBJECT_EXPORT_NUMBER_MONTH
- DIVA_CORE_SYSTEM_OBJECT_IMPORT_NUMBER_MONTH
- DIVA_CORE_SYSTEM_OBJECT_INSTANCE_EXPORT_NUMBER_MONTH

- DIVA_CORE_SYSTEM_OBJECT_INSTANCE_IMPORT_NUMBER_MONTH
- DIVA_CORE_SYSTEM_READ_WRITE_ABORTED_NUMBER_MONTH
- DIVA_CORE_SYSTEM_READ_WRITE_MONTH
- DIVA_CORE_SYSTEM_READ_WRITE_NUMBER_MONTH
- MEDIA_ARCHIVED_OBJECT_DATASIZE_MONTH
- MEDIA_DATA_SIZE_DAY
- MEDIA_DATA_SIZE_MONTH
- MEDIA_OBJECT_INSTANCE_EXTERN_MONTH
- MEDIA_OBJECT_INSTANCE_ONLINE_MONTH
- MEDIA_READ_WRITE_MONTH
- MEDIA_READ_WRITE_NUMBER_MONTH
- MEDIA_RESTORE_OBJECT_DATASIZE_MONTH
- MEDIA_TAPE_EXPORT_NUMBER_MONTH
- MEDIA_TAPE_IMPORT_NUMBER_MONTH
- SD_ARCHIVE_OBJECT_DATASIZE_MONTH
- SD_READ_MONTH
- SD_READ_NUMBER_MONTH
- SD_RESTORE_OBJECT_DATASIZE_MONTH
- SD_TIME_MONTH
- SD_WRITE_MONTH
- SD_WRITE_NUMBER_MONTH
- TAPE_DRIVE_DATA_RATE_MONTH
- TAPE_DRIVE_ERROR_RATE_MONTH
- TAPE_DRIVE_NUMBER_READ_WRITE_ABORTED_MONTH
- TAPE_DRIVE_OPERATION_TOTAL_TIME_MONTH
- TAPE_DRIVE_READ_WRITE_MONTH
- TAPE_DRIVE_READ_WRITER_NUMBER_MONTH
- TAPE_DRIVE_TIME_ALL_OPERATION_MONTH
- TAPE_DRIVE_TIME_READ_MONTH
- TAPE_DRIVE_TIME_WRITE_MONTH
- TAPE_LIBRARY_NUMBER_DISMOUNT_ABORTED_MONTH
- TAPE_LIBRARY_NUMBER_MOUNT_ABORTED_MONTH
- TAPE_LIBRARY_NUMBER_MOUNT_MONTH
- TAPE_LIBRARY_NUMBER_READ_MONTH
- TAPE_LIBRARY_NUMBER_WRITE_MONTH

- TAPE_LIBRARY_READ_MONTH
- TAPE_LIBRARY_WRITE_MONTH
- TRANSCODE_DATA_MONTH
- TRANSCODE_NUMBER_MONTH
- TRANSCODE_TIME_MONTH
- MEDIA_OBJECT_INSTANCE_CREATE_DAY
- MEDIA_OBJECT_INSTANCE_DELETE_DAY
- MEDIA_OBJECT_INSTANCE_CREATE
- MEDIA_OBJECT_INSTANCE_DELETE
- MEDIA_OBJECT_INSTANCE_CREATE_MONTH
- MEDIA_OBJECT_INSTANCE_DELETE_MONTH
- MEDIA_OBJECT_INSTANCE_EXTERN_DATASIZE_DAY
- MEDIA_OBJECT_INSTANCE_EXTERN_DATASIZE_MONTH
- MEDIA_OBJECT_INSTANCE_ONLINE_DATASIZE_DAY

Configuration

This chapter describes the Analytics App configuration, and includes the following information:

Topics

Main Configuration

You must perform the main configuration tasks described in this section. You configure the Analytics App on the Analytics App tab in the System Management App.

Note: Some configuration options require logging in with the Engineer user account, which is reserved for Telestream Support.

Configure the following options, contacting Telestream Support as necessary:

- System Management App GUI: Enable/Disable Analytics App Configuration

  This option enables you to view the Analytics App panel in the System Management App. The Engineer log in is required to modify this parameter; contact Telestream Support.

- DB: Maximum Possible History of Events in Months

  This option identifies the maximum number of events that can be stored in the system. After this number is exceeded, the Analytics App removes the oldest entries using an automated database job that executes every hour.

- DB: Maximum Possible Number of Metrics

  This option identifies the maximum number of metrics that can be stored in the system. After this number is exceeded, the Analytics App removes the oldest entries using an automated database job that executes once per day, every day.

- DIVA Core: Enable/Disable Analytics App Data Collection

  This option enables or disables the Analytics App Data Collection. The Engineer log in is required to modify this parameter; contact Telestream Support.

- DIVA Core: Size Triggering Event Queue DB flush (nb events)

  This option identifies the number of events collected ands stored in memory before saving them to the database.

- DIVA Core: Time Delay Triggering Event Queue DB flush (seconds)

  This option identifies the maximum time interval for saving events to the database. If this interval is reached before the Size Triggering parameter is reached, the events are saved to the database regardless of how many have been collected.

Analytics App Resources

The System Management App includes configuration elements specific to the Analytics App as follows:

- Tape Drives

  You edit the drive serial number in the Drive Edit dialog box. This is useful if the information was either not retrieved, or entered improperly, during a Sync DB process. The firmware of the drive is displayed in a uneditable field. The firmware information is obtained from the Actors when they scan for tape drive devices. You can view this information in the System Management App.

- Actors

  The Actors panel in the System Management App displays the First Utilization Date in a uneditable field. There is no additional Analytics App configuration necessary for the Actors.

- Managed Storage

  The Managed Storage panel in the System Management App includes an editable Name field to enter (or edit) the library description, and a uneditable First Utilization Date field. There is no additional Analytics App configuration necessary for the Managed Storage.

Configuring Analytics App Events and Metrics

The Event Definitions panel displays the list of event definitions available for use in the metrics. Event definitions are factory set and cannot be modified. See *Event Definitions* for a list of predefined event definitions.

You can double-click an event definition to display a dialog box listing its associated parameters.

The Metric Definitions panel lists the available metrics. Built-in metrics (DIVAPROTECT* metrics) cannot be edited, and therefore do not appear in the Metric Definitions panel. See *Metric Definitions* for a list of predefined metric definitions.

You can double-click a *Metric Definition* to display an edit dialog box where you can examine or modify the metric. This has the same effect as selecting a metric in the list, and then clicking the Edit button. The + and - buttons allow adding or deleting a metric.

You can enter a description of the metric in the Description field that is displayed next to the Metric Name in the Metric Definitions panel. The description is also displayed in the System Management App when you pause your mouse over an entry in the Metric Definition menu list.

The Enabled check box enables (selected) or disables (deselected) data collection for the metric.

The Collection Type fields specify which event parameter (for example, Transfer Size) is collected as the data, and the statistical computation operated on it (for example, Sum). The available statistics are as follows:

- Average
- Count
- Maximum
- Minimum
- Sum
- Weight Based Average

The Weighted By field specifies the divider parameter for Weight Based Average collection (for example, Duration).

The Collected Event list specifies the events from which the collected event parameter is retrieved. The list only displays event types suitable for the parameter specified in the second field for the Collection Type. Event types with no such parameter attached are absent from the listing.

The Resource menu list specifies which resource to use to break down the data. For example, if you select Drive Serial Number, the Analytics App generates separate metrics for each drive.

The Interval field specifies the interval for metric calculation. For example, selecting 1 Day generates a metric daily (if corresponding data is available). The metric calculation is based on the associated events that occurred in the last 24 hours.

Sample Metric Configuration

This is a sample configuration procedure to create your own metric that captures the average duration of read and write operations on a tape in a DIVA Core system. You use the following procedure to capture this data:

1. Open the System Management App and navigate to the Analytics App tab.
2. Locate the Metric Definitions panel and click + to begin adding a new metric.

   The Metric Definition dialog box is displayed.
3. Enter a unique name for the metric in the Name field. For example, ACTOR_READ_WRITE_ABORTED_NUMBER_SD.
4. Add a description in the Description field, and then enable it by selecting the Enabled check box.
5. Set both Collection Type fields, and the Weighted By field as appropriate.

   If you select Weight Based Average in the first list for the Collection Type, it enables the Weighted By field. You must then select a value to weigh the metric definition. The values for the Weighted By field are identical to those in the second Collection Type field (for example, Event ID).
6. Select the events to collect using the Collected Event check boxes.
7. Use the menu list top select the Aggregation Resource type.
8. You can use the menu list to set the Aggregation Interval, but it can be left at the default (one hour).
9. Click OK to complete the process.

Operations

The Analytics App module is an analytical and monitoring option integrated into the DIVA Core Suite, bringing long-term content protection, management, and security to DIVA Core systems. Analytics App includes reporting through the Journal using various metrics as described in the following sections. The following operational information is included in this chapter:

Topics

Collecting Operational Events

Operational events are the primary events collected by the Analytics App. The following three tables identify event fields and the types of events associated with them. There are three tables only due to the amount of entries. Locate the desired field on the top row of the table, and then follow down the column to identify which events are valid for the selected field.

Event	Event Type	Tape Type	Tape Barcode	Drive Type	Drive Name	Disk Name	Drive Serial Number	Library Serial Number	SD Name	Actor Name
TAPE_INSERT	Yes	Yes	Yes					Yes		
TAPE_INSERT_ERR	Yes							Yes		
TAPE_MOUNT	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_MOUNT_ERR	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_POSITION	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_POSITION_ERR	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_READ	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_READ_ERR	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_WRITE	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_WRITE_ERR	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
DISK_READ[1]	Yes					Yes				Yes
DISK_READ_ERR[1]	Yes					Yes				Yes
DISK_WRITE[1]	Yes					Yes				Yes
DISK_WRITE_ERR[1]	Yes					Yes				Yes
SD_READ	Yes								Yes	Yes
SD_READ_ERR	Yes								Yes	Yes
SD_WRITE	Yes								Yes	Yes
SD_WRITE_ERR	Yes								Yes	Yes
TAPE_UNLOAD	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_UNLOAD_ERR	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_DISMOUNT	Yes	Yes	Yes	Yes	Yes		Yes	Yes		
TAPE_DISMOUNT_ERR	Yes	Yes	Yes	Yes	Yes		Yes	Yes		
TAPE_EJECT	Yes	Yes	Yes					Yes		
TAPE_EJECT_ERR	Yes	Yes	Yes					Yes		
END_OF_TAPE	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
TAPE_REPACK	Yes							Yes		
ARCHIVE_REQUEST	Yes								Yes	
COPY_REQUEST	Yes									

Event	Event Type	Tape Type	Tape Barcode	Drive Type	Drive Name	Disk Name	Drive Serial Number	Library Serial Number	SD Name	Actor Name
COPY_AS_REQUEST (to new)	Yes									
CREATE_INSTANCE	Yes									
RESTORE and PARTIAL_RESTORE	Yes								Yes	
DELETE_OBJECT	Yes									
DELETE_INSTANCE	Yes									
TRANSCODE_END	Yes									Yes
TRANSCODE_ERR	Yes									Yes
STOPPED_ON_CANCEL	Yes									
CHECKSUM_ERROR_TAPE	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes
CHECKSUM_ERROR_DISK	Yes					Yes				Yes
CHECKSUM_ERROR_SD	Yes								Yes	Yes
TAPE_IMPORT	Yes		Yes							
TAPE_EXPORT	Yes		Yes							

1. The transcoder work directory is not a DIVA Core disk. No DISK READ or DISK WRITE events are created when accessing this directory.

The presence of Optional in the following table indicates that it is optional. New Instance IDs are only generated after the final write to the destination media. Instance ID is not available in the following cases:

- Temporary instances created in cache disk by an Archive job
- SD READ or SD WRITE during the transcode phase of an archive when transferring to or from the transcoder work directory
- Cache DISK READ or DISK WRITE when performing a tape to tape Copy job
- Tape positioning before a tape write (Archive job)
- End Of Tape (EOT exception) encountered during an Archive job

Event	Object Name[1]	Object Collection[1]	Object Instance[1]	Media (Tape Group or Array)	Job ID	Event End Time	Event Duration	Transfer Size	Transfer Rate
TAPE_INSERT						Yes	Yes		
TAPE_INSERT_ERR				Yes		Yes			
TAPE_MOUNT				Yes		Yes	Yes		
TAPE_MOUNT_ERR				Yes		Yes			
TAPE_POSITION	Yes	Yes	Optional	Yes	Yes	Yes	Yes		
TAPE_POSITION_ERR	Yes	Yes	Optional	Yes	Yes	Yes			
TAPE_READ	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TAPE_READ_ERR	Yes	Yes	Yes	Yes	Yes	Yes		Yes	
TAPE_WRITE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
TAPE_WRITE_ERR	Yes	Yes		Yes	Yes	Yes		Yes	
DISK_READ[2]	Yes	Yes	Optional	Yes	Yes	Yes	Yes	Yes	Yes
DISK_READ_ERR[2]	Yes	Yes	Optional	Yes	Yes	Yes		Yes	
DISK_WRITE[2]	Yes	Yes	Optional	Yes	Yes	Yes	Yes	Yes	Yes
DISK_WRITE_ERR[2]	Yes	Yes		Yes	Yes	Yes		Yes	
SD_READ	Yes	Yes	Optional		Yes	Yes	Yes	Yes	Yes
SD_READ_ERR	Yes	Yes	Optional		Yes	Yes		Yes	
SD_WRITE	Yes	Yes	Optional		Yes	Yes	Yes	Yes	Yes
SD_WRITE_ERR	Yes	Yes			Yes	Yes		Yes	
TAPE_UNLOAD				Yes		Yes	Yes		
TAPE_UNLOAD_ERR				Yes		Yes			
TAPE_DISMOUNT				Yes		Yes	Yes		
TAPE_DISMOUNT_ERR				Yes		Yes			
TAPE_EJECT						Yes	Yes		
TAPE_EJECT_ERR						Yes			

Event	Object Name[1]	Object Collection[1]	Object Instance[1]	Media (Tape Group or Array)	Job ID	Event End Time	Event Duration	Transfer Size	Transfer Rate
END_OF_TAPE	Yes	Yes	Optional	Yes	Yes	Yes			
TAPE_REPACK					Yes	Yes			
ARCHIVE_REQUEST	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
COPY_REQUEST	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
COPY_AS_REQUEST (to new)	Yes	Yes		Yes	Yes	Yes	Yes	Yes	
CREATE_INSTANCE	Yes		Yes	Yes	Yes	Yes		Yes	
RESTORE and PARTIAL_RESTORE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
DELETE_OBJECT	Yes	Yes			Yes	Yes			
DELETE_INSTANCE	Yes	Yes	Yes	Yes	Yes	Yes		Yes	
TRANSCODE_END	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
TRANSCODE_ERR	Yes	Yes	Yes		Yes	Yes			
STOPPED_ON_CANCEL	Yes	Yes			Yes	Yes			
CHECKSUM_ERROR_TAPE	Yes	Yes	Optional	Yes	Yes	Yes			
CHECKSUM_ERROR_DISK	Yes	Yes	Optional	Yes	Yes	Yes			
CHECKSUM_ERROR_SD	Yes	Yes	Optional		Yes	Yes			
TAPE_IMPORT				Yes		Yes			
TAPE_EXPORT				Yes	Yes	Yes			

1. Object information is not provided for Repack jobs.
2. The transcoder work directory is not a DIVA Core disk. No DISK READ or DISK WRITE events are created when accessing this directory.

Event	Transfer Error Rate	Error Code	Error Message	Transcoder or Analyzer Name	Number of Archive Operations	Data Size
TAPE_INSERT						
TAPE_INSERT_ERR		Yes	Yes			
TAPE_MOUNT						
TAPE_MOUNT_ERR		Yes	Yes			
TAPE_POSITION						
TAPE_POSITION_ERR		Yes	Yes			
TAPE_READ	Yes					
TAPE_READ_ERR		Yes	Yes			
TAPE_WRITE	Yes					
TAPE_WRITE_ERR		Yes	Yes			
DISK_READ[1]						
DISK_READ_ERR[1]		Yes	Yes			
DISK_WRITE[1]						
DISK_WRITE_ERR[1]		Yes	Yes			
SD_READ						
SD_READ_ERR		Yes	Yes			
SD_WRITE						
SD_WRITE_ERR		Yes	Yes			
TAPE_UNLOAD						
TAPE_UNLOAD_ERR		Yes	Yes			
TAPE_DISMOUNT						
TAPE_DISMOUNT_ERR		Yes	Yes			
TAPE_EJECT						
TAPE_EJECT_ERR		Yes	Yes			
END_OF_TAPE						
TAPE_REPACK						
ARCHIVE_REQUEST					Yes	
COPY_REQUEST					Yes	
COPY_AS_REQUEST (to new)					Yes	
CREATE_INSTANCE						
RESTORE and PARTIAL_RESTORE					Yes	
DELETE_OBJECT						
DELETE_INSTANCE						

Event	Transfer Error Rate	Error Code	Error Message	Transcoder or Analyzer Name	Number of Archive Operations	Data Size
TRANSCODE_END				Yes		
TRANSCODE_ERR		Yes	Yes	Yes		
STOPPED_ON_CANCEL						
CHECKSUM_ERROR_TAPE						
CHECKSUM_ERROR_DISK						
CHECKSUM_ERROR_SD						
TAPE_IMPORT						Yes
TAPE_EXPORT						Yes

1. The transcoder work directory is not a DIVA Core disk. No DISK READ or DISK WRITE events are created when accessing this directory.

Collecting Hardware Resource Statistics

The Analytics App collects hardware information from the tape drives and direct-attached Managed Storage sent by the Actors. Managed Storage information is unavailable if a Managed Storage Server is used instead of direct-attached Managed Storage. The information, called Resource Statistics, is updated in real time in the Analytics App. The information is populated in the Drive Alert and Library Alert logs, and updates the tape drive's firmware information in the DIVA Core database. These special events are not available for use in Metric Definitions.

The following table lists the data sent by the Actors for each Quick Response Event type:

Event	Clean Alert[1]	Tension Alert[2]	Drive Alert	Drive Firmware	Library Alert
Time-stamp	X	X	X	X	X
Event ID	X	X	X	X	X
Request ID			X		
Drive Serial Num	X	X	X		
Library Serial Num					X
Tape Name (barcode)		X	X		
Tape Type		X			
Alert Log List[3]			X		X
Drive List[4]				X	

1. The Actor issues Clean Alerts when a drive indicates it needs cleaning. These alerts are typically trapped by the library, or the library server, and the cleaning process is handled by those components. For this reason, DIVA Core does not include a drive cleaning mechanism.
2. The Actor issues a Tension Alert when a drive indicates it requires re-tensioning.
3. The Alert Log List is a variable length list of tape drive or library alerts. Each alert includes a parameter, a severity, and a text message.
4. The Drive List is a variable length list of drive information objects. Each information object includes the Serial Number, Drive Name, and Firmware Release level. The Firmware Release level is saved in the database.

Collecting Quick Response Data (QRD)

The Analytics App maintains a set of statistics about the archive system resources called Quick Response Data (QRD). QRD is not based on events, it is calculated from information available in the DIVA Core database, and updated every hour through an automated database job.

The following is a list of the QRD available, listed by resource:

Actors, Transcoders, and Analyzers

The QRD collected for these resources is the First Utilization Date.

Arrays

The QRD collected for arrays is as follows:

- Total used space - this is the exact sum of used space across all disks in the array, both online and offline.
- Total online object used space
- Total externalized (offline) object used space

Disks

The QRD collected for disks is as follows:

- First Utilization Date
- Last Access, Last Read, and Last Write dates

Tape Groups

The QRD collected for Tape Groups is as follows:

- Total used space - this is the exact sum of used space across all disks in the array, both online and offline.
- Total online object used space
- Total externalized (offline) object used space

Managed Storage

The QRD collected for Managed Storage is as follows:

Note: Currently, a tape is considered offline only when it is ejected. After a tape is ejected it is not considered as part of the library.

- First Utilization Date
- Total number of tapes
- Total number of Nearline (online) tapes
- Total number of offline tapes

- Total number of blank tapes
- Total number of non-writable (write protected) tapes
- Total data stored in library
- Total data stored Nearline (online)
- Total data stored offline
- Total storage capacity (online and offline total)
- Total Nearline (online) capacity
- Total offline capacity
- Total free space capacity (online and offline total)
- Total number of objects archived to the tapes in the associated library
- Total number of objects Nearline (online)
- Total number of objects offline

Media

The QRD collected for media is as follows:

- First utilization Date
- Last Utilization Date
- Used space - this is the sum of offline and online instance sizes.

Objects

The QRD collected for objects is the Last Read Date.

Object Instances

The QRD collected for object instances in the Last Verify Date.

System

The QRD collected for the system is the First Use Date.

Server

The QRD collected for Servers is the First utilization Date.

Tapes

The QRD collected for tapes is as follows:

- First Insertion Date - this is the date it first appeared in the system.
- First Utilization Date - this is the date it was first mounted.

Collecting Drive and Managed Storage Alert Logs

Drive and Managed Storage Alert Logs contain a history of the codes that have been generated by the hardware. The Actors read the codes during normal operation. The information is saved to the database whenever reported by the hardware.

The following table is an extract of the Sony SAIT-1 Tape Drive Specification. Refer to your manufacturer's manual for your particular hardware.

Code	Flag	Type	Client Message
01h	Read Warning	Warning	The drive is having problems reading data. No data has been lost, but there has been a reduction in the performance of the medium.
02h	Write Warning	Warning	The drive is having problems writing data. No data has been lost, but there has been a reduction in the capacity of the volume.
03h	Hard Error	Warning	The operation has stopped because an error has occurred while reading or writing data, which the drive cannot correct.
04h	Media	Critical	Your data is at risk: **1.** Copy any data you require from this cartridge. **2.** Do not use this tape again. **3.** Restart the operation with a different cartridge.

Collecting and Calculating Metrics

This section describes how metrics are collected and calculated.

Calculating Metrics Based on Operations Events

Metrics are calculated and updated every hour by an automated database job running in the background. Each metric's calculation is based on a selection of Event Types (for example, SD READ, SD WRITE) from which a common event parameter is extracted (for example, Transfer Size), and processed by a statistical operation (for example, Sum). The metric takes into account events collected over a particular interval that depend on the Metric Type:

- Hourly
- Daily
- Monthly
- Yearly
- Lifetime

A Metric is calculated based on associated events that occurred within the previous hour. If none of the associated events occurred, the metric is not calculated nor updated. If some associated events occurred, the metric is calculated or updated. All of the Metric Types are based upon these hourly calculations.

For example, if an associated event occurs at 10:00 AM on February 1st, 2017 the following Metrics (if they are defined) will be calculated or updated:

- 10:00 AM Hourly Metric
- 2/1/2017 Daily Metric
- February 2017 Monthly Metric
- 2017 Yearly Metric
- Lifetime Metric

The following is a list of collection types:

- Sum Collection Type

  This collection type calculates a metric by adding event parameter values.
- Count Collection Type

  This collection type calculates a metric by counting event parameter values.
- Minimum Collection Type

  This collection type calculates a metric using the minimum event parameter value.
- Maximum Collection Type

  This collection type calculates a metric using the maximum event parameter value.

- Average Collection Type

  This collection type calculates a metric by averaging the event parameter values.

- Weight Base Average Collection Type

  This collection type calculates a metric by dividing the sum of the event parameter values by a weight factor, in contrast to the standard average calculation being divided by the count of event parameter values. Metrics configured with this collection type must specify a weight factor, otherwise the following error is generated:

  ```
  ORA-20200 Weight Factor to calculate Weight based average is not
  mentioned.
  ```

The following is a sample Weight Based Average calculation:

Metric Name

DIVA_CORE_SYSTEM_AVG_READ_WRITE_DAY

Collection Type

Weight Based Average

Collection Field

Transfer Size

Weight Factor

Duration

Calculation for Hourly Metrics

SIZE (SUM of Transfer Size) / TIME (SUM of Transfer Duration) = V (Velocity)

Calculation for Day, Month, Year and Lifetime Metrics

SUM (Velocity * Time) / SUM (Time)

Calculating Built-in Metrics

The Analytics App comes with built-in metrics that do not appear in the System Management App, and cannot be edited. The built-in metrics are available in the System Management App with the standard ones. Built-in metrics names all start with DIVAPROTECT. The following are several of the built-in metrics. In each example, the first command is for daily counts, and the second command is for lifetime counts.

How many times was the Analytics App executed?

The following metrics count how many times the Analytics App has been executed. They update each time the Analytics App runs the hourly database job.

DIVAPROTECT_EXECUTION_COUNT_DAY
DIVAPROTECT_EXECUTION_COUNT

How many events did the Analytics App process?

The following metrics count how many events the Analytics App has processed while calculating metrics. They are updated each time the Analytics App processes an event.

DIVAPROTECT_EVENTS_PROCESSED_DAY
DIVAPROTECT_EVENTS_PROCESSED

How many metrics did the Analytics App process?

This defines how many metrics the Analytics App has calculated or updated. These metric values are updated each time a metric is calculated or updated in the DIVA Core system.

DIVAPROTECT_METRIC_PROCESSED_DAY
DIVAPROTECT_METRIC_PROCESSED

What is the number of the Analytics App internal errors?

The following metrics count the total number of the Analytics App errors that have occurred while calculating or updating a metric. They are updated each time an error occurs.

DIVAPROTECT_INTERNAL_ERROR_DAY
DIVAPROTECT_INTERNAL_ERROR_DAY

Monitoring Use and Statistics in the GUI

You can view the Analytics App Journal and Metrics through the System Management App. Click the appropriate icon under the Analytics tab to display either the Journal View or Metrics View.

System Events (Journal)

The Analytics App metrics are continually gathered and written to a temporary table in the database. Once per hour the metrics are removed from the temporary table and committed to a permanent table.

The Journal View provides a set of filters to narrow down data retrieval, and a list view for the retrieved information. You can filter by Event Definition, Drive Serial Number, Begin Date/Time, End Date/Time, and enter search keywords into the appropriate fields.

You can search for a particular Barcode, Actor Name, Server, Object Collection, Object Instance Number, Error Code (including warnings, errors, and so on) and Error Message. You click Refresh on the top right of the display to apply your filters and perform the search.

To disable a filter, you can enter the wildcard character (an asterisk) for a text field, select the ALL value in a menu list, or deselect the check box to disable date and time filtering.

You can recall a previously used set of filters using the Previous Queries list (located in the lower right corner of the Journal view). The menu list remembers the last 10 used filter sets.

The Journal view uses a color chart to identify the severity of each event:

- Blue indicates information.
- Orange indicates a warning.
- Red indicates an error.

The columns displayed in the Journal View are as follows:

- Severity

  This column displays the severity of the event.
- ID

  This column displays the ID used to identify the event internally.
- Request ID

  This column displays the Request ID associated with the event.
- Start Time

  This column displays the event start time.

- Event Time

  This column displays the time the event occurred.
- Duration

  This column displays the total duration of the event in seconds.
- Event

  This column displays the type of event.
- Tape Barcode

  This column displays the tape barcode associated with the event.
- Drive Serial Number

  This column displays the serial number of the drive associated with the event.
- Library Serial Number

  This column displays the serial number of the library associated with the event.
- Disk Name

  This column displays the name of the disk associated with the event.
- Actor Name

  This column displays the name of the Actor associated with the event.
- Server

  This column displays the name of the Server associated with the event.
- Object Name

  This column displays the name of the object associated with the event.
- Object Collection

  This column displays the Collection of the object associated with the event.
- Object Instance

  This column displays the instance number of the object associated with the event.
- Transfer Size

  This column displays the total data transfer size, in bytes, for the event.
- Transfer Rate

  This column displays the rate of transfer, in bytes, for the event.
- Error Rate

  This column displays the number of errors per Gigabyte of data transferred. These errors are automatically recovered by the tape drive.
- Error Code

  This column displays the internal error code, when applicable, for the event.
- Error Message

  This column displays a standardized error message, when applicable, for the event.

You can double-click any entry in the list to display its properties. A context menu is accessible for events specifically related to a job by right-clicking the entry in the Journal view. The context menu enables you to quickly navigate to the corresponding Logged Jobs view or Job Properties dialog box.

Library Alert Logs Information

The Library Alert Logs View lists errors reported by directly-attached, SCSI protocol Managed Storage. This information is vendor specific and varies depending on the library make and model.

A set of filters is available to narrow down searches. You can filter the results by Severity by selecting (display), or deselecting (do not display), the appropriate check box for Information, Warnings, and Critical Errors. You can also filter by Message, Begin Date/Time, End Date/Time, and Alert ID, and enter search keywords into the appropriate fields. You click Refresh on the top right of the display to apply your filters and perform the search.

To disable a filter, you can enter the wildcard character (an asterisk) for a text field, or deselect the check box to disable date and time filtering.

The columns displayed in the Library Alert Logs View are as follows:

- Severity

  This column displays the severity of the alert (*Informational, Warning or Error*).
- Date/Time

  This column displays the date and time of the occurrence.
- Alert ID

  This column displays the alert ID number as reported by the library, and is vendor specific.
- Message

  This column displays the message field as reported by the library, and is vendor specific.

Drive Alert Logs Information

The Drive Alert Logs View lists errors reported by tape drives. This information is vendor specific and varies depending on the make and model. A set of filters is available to narrow down searches. For example, instance errors are viewable related to a particular tape.

A set of filters is available to narrow down searches. You can filter the results by Severity by selecting (display), or deselecting (do not display), the appropriate check box for Information, Warnings, and Critical Errors. You can also filter by Tape Barcode, Request ID, Begin Date/Time, End Date/Time, and Alert ID, Drive Serial Number, and Message, and then enter search keywords into the appropriate fields. You click Refresh on the top right of the display to apply your filters and perform the search.

To disable a filter, you can enter the wildcard character (an asterisk) for a text field, or deselect the check box to disable date and time filtering.

The columns displayed in the Drive Alert Logs View are as follows:

- Severity

  This column displays the severity of the alert (Informational, Warning or Error).

- Date/Time

  This column displays the date and time of the occurrence.

- Drive Serial Number

  This column displays the drive that reported the alert.

- Tape Barcode

  This column displays the barcode of the tape that was mounted when the alert was reported.

- Alert ID

  This column displays the alert ID number as reported by the library, and is vendor specific.

- Message

  This column displays the message field as reported by the library, and is vendor specific.

- DIVA Core Request ID

  This column displays the ID number of the job related to the alert (if applicable).

System Analytics (Metrics) Information

You can examine The Analytics App Metrics in the System Management App Metrics View. The Metrics View provides a set of filters to narrow down searches. You can filter information by Metric Definition, Interval, Aggregation Item, Resource Name, Value, Count, Start Date, and Last Update Date. The Metric Definition menu list contains the metrics defined in the System Management App, and the built-in metrics (that start with DIVAPROTECT*). You click Refresh on the top right of the display to apply your filters and perform the search.

Hovering over a metric produces a dialog box that includes the metric Name, Description, Collecting (the event parameter selected metric is collecting), Resource, Type, and Included Events.

Double-clicking an entry in the list will display its properties dialog box.

Right-clicking an entry displays a context menu enabling you to reset the current value or hit count of the metric to zero. You must be logged in the System Management App as Administrator for these options to be enabled.

The columns displayed in the Metrics View are as follows:

- Metric ID

  This column displays the internal ID used to identify the metric.
- Start Date

  This column displays the date and time the collection of the metric started.
- Last Update

  This column displays the last date and time the metric collection was updated.
- Metric Name

  This column displays the name of the Metric Definition.
- Interval

  This column displays the metric collection interval.
- Resource

  This column displays the type of resource involved in the events the metric is based on.
- Collecting

  This column displays the event parameter the metric is collecting.
- Resource Name

  This column displays the name of the resource involved in the events the metric is based on.
- Value

  This column displays the current metric value.
- Count

  This column displays the number of times the metric was calculated or updated.

System QRD (Quick Response Data) Information

System QRD (Quick Response Data) includes the First Utilization Date and is displayed in the Information dialog box. You click DIVA Core Information under the System Management App Analytics tab to access this information.

Server QRD (Quick Response Data) Information

You view the Server QRD (Quick Response Data) information in the System Management App Server View. The information includes the First Utilization Date. You double-click an entry in the list to display additional information.

Media QRD (Quick Response Data) Information

You view the Media QRD (Quick Response Data) in the System Management App Media View. The metrics displayed in the Media View are as follows:

- First Utilization Date

  This displays the date and time the media was first mounted.
- Last Utilization Date

  This column displays the last date and time the media was used.
- Used Space

  This column displays the sum of the used space on all online and offline media.

Library QRD (Quick Response Data) Information

You view the Library QRD (Quick Response Data) and Serial Numbers in the System Management App Library View. Double-clicking an entry in the list displays additional information in a dialog box.

The metrics displayed in the Library View are as follows:

Note: All offline values mentioned are not supported in this DIVA Core release. Currently, a tape is considered offline only when it is ejected. After a tape is ejected it is not considered to be part of the Library.

- Type

  This column displays the type of library.
- First Utilization Date

  This column displays the date and time the library was first used.
- Total Tapes

  This column displays the total number of tapes in the library.
- Total Data Stored

  This column displays the total amount of data stored in the library (in megabytes).
- Total Capacity

  This column displays the sum of the total capacity of all tapes in the library (in gigabytes).
- Free Capacity

  This column displays the sum of the total amount of free space on all tapes in the library (in gigabytes).
- Total Objects

  This column displays the sum of the total number of objects stored on all tapes in the library.

- Total Objects Online

  This column displays the sum of the total number of objects stored on all online tapes in the library.

- Total Objects Offline

  This column displays the sum of the total number of objects stored on all offline tapes in the library.

Extended Tape Drive QRD Information

You view the Tape Drive QRD (Quick Response Data) in the System Management App Drives View. This information includes drive Serial Numbers and Firmware level. The Serial Number is displayed in the main view.

Right-click a drive to display additional information in a dialog box. The Properties tab in the dialog box includes the Firmware Level and other basic information about the drive. The Usage tab in the dialog box includes the following columns:

- Installation Date

  This column displays the date and time the drive was initially installed.

- First Utilization Date

  This column displays the date and time the drive was first mounted.

- Last Upgrade Date

  This column displays the date and time of the last drive upgrade.

- Last Cleaning Date

  This column displays the date and time of the last time the drive was cleaned.

Extended Tape QRD Information

You view the Tape QRD (Quick Response Data) in the System Management App Tapes View under the Home tab. You double-click your selected tape to open the Tape Properties dialog box to view additional information.

The QRD fields (specifically) displayed in the Tape Properties dialog box are as follows:

- First Insertion Date

  This field displays the date and time the tape was first inserted into the library.

- First Utilization Date

  This field displays the date and time the tape was first mounted.

Extended Disk QRD Information

You view the Disk QRD (Quick Response Data) in the System Management App Disks View under the Home tab.

The QRD columns (specifically) displayed in the Disks View are as follows:

- First Utilization Date

  This column displays the date and time the disk was first used.
- Last Access Date

  This column displays the last date and time the disk was accessed.
- Last Read Date

  This column displays the last time a read operation was performed on the disk.
- Last Write Date

  This column displays the last time a write operation was performed on the disk.

Extended Object and Object Instance Information

You view the Last Read Date (and time) for an object in the System Management App Archived Objects View.

You can view the Last Verify Date for an object in the Instances panel under the Object Properties View. You double-click the object you want to view in the Archived Objects list to open the Object Properties dialog box.

Extended Actor Information

You view extended information for your Actors in the Usage, Transcoders and Analyzer tabs of the Actor Properties dialog box in the System Management App. You display the Actor Properties dialog box by right-clicking an Actor in the Actors View, under the Home tab, and selecting Properties from the context menu.

Note: Linux-based Actors only support Telestream Vantage transcoding operations.

The Usage tab in the Actor Properties dialog box contains the First Utilization Date field. This field displays the date and time when the selected Actor was first used.

The Transcoders tab in the Actor Properties dialog box contains the following columns:

- Name

  This column displays the transcoder name.
- Version

  This column displays the transcoder release level.
- Type

  This column displays the transcoder type.

- First Utilization Date

  This column displays the date and time the transcoder was first used with the selected Actor.

The Analyzer tab in the Actor Properties dialog box contains the following fields:

- Version

  This field displays the analyzer release level.

- First Utilization Date

  This field displays the date and time the analyzer was first used.

Tracking Checksum Error Events in the Analytics App Journal

You view Checksum Error Events in the Analytics App Journal under the System Management App Analytics tab. The following table identifies the Checksum Event Types:

Event ID	Event Name	Event Description	Severity
180	CHECKSUM_ERROR_TAPE	A checksum verification produced an error reading for the tape.	2
181	CHECKSUM_ERROR_DISK	A checksum verification produced an error reading for the disk.	2
182	CHECKSUM_ERROR_SD	A checksum verification produced an error reading for the Server.	2

Frequently Asked Questions

This chapter contains frequently asked questions about the Analytics App, and includes the following information:

- How often are metrics updated?

  The Analytics App calculates and updates the data metrics every hour through an automated database job running in the background.

- How is the Analytics App installed in a new DIVA Core installation?

  The Analytics App is automatically installed with DIVA Core; no additional installation is required.

- Can you choose not to install the Analytics App?

  You cannot select to bypass the Analytics App installation. The Analytics App is a mandatory subsystem built into DIVA Core. However, you can disable the Analytics App data collection and computation after the system has been installed.

- Can the Analytics App be disabled?

  Yes, you can disable the Analytics App functionality through proper configuration. See *Main Configuration* for detailed configuration options.

- How is Engineering Mode accessed?

  You must contact Telestream Support to access the system in Engineering Mode. Engineering Mode is only accessible to Telestream Support personnel to avoid accidental misconfiguration of the system. Misconfiguration can possibly result in degradation of DIVA Core operations.

Event and Metric Definitions

The following table identifies the Analytics App event and metric definitions.

Topics

Event Field Definitions

The following table identifies the Analytics App Event Field Definitions:

Event Field ID	Displayed Name	Aggregatible Resource?	Collectible?	Type	Quantifier
1	Event ID	No	Yes	Number	
2	Event Definition ID	Yes	No	Number	
3	Tape Type	Yes	No	String	
4	Tape Barcode	Yes	No	String	
5	Drive Type	Yes	No	String	
6	Drive Name	Yes	No	String	
7	Drive Serial Number	Yes	No	String	
8	Actor Name	Yes	No	String	
9	Object Name	Yes	No	String	
10	Object Collection	Yes	No	String	
11	Object Instance	No	No	Number	
12	Media	Yes	No	String	
13	Request ID	No	No	Number	
14	Event End Time	No	No	Date	
15	Event Duration	No	Yes	Number	Seconds
16	Transfer Size	No	Yes	Number	Bytes
17	Transfer Rate	No	Yes	Number	Mbps
18	Transfer Error Rate	No	Yes	Number	Errors per GB
19	Error Code	Yes	No	Number	
20	Error Message	No	No	String	
21	Disk Name	Yes	No	String	
22	Library Serial Number	Yes	No	String	
23	SD Name	Yes	No	String	
24	Transcoder Name Analyzer Name	Yes	No	String	

Event Field ID	Displayed Name	Aggregatible Resource?	Collectible?	Type	Quantifier
25	Local DIVA Core System	Yes	No	String	
26	Number of Operations	No	Yes	Number	
27	EV_SIZE	No	Yes	Number	Bytes

Event Definitions

The following table identifies the Analytics App Event Definitions:

Event ID	Name	Description	Severity
1	TAPE_INSERT	Tape insert event	3
2	TAPE_INSERT_ERR	Tape insert error event	2
10	TAPE_MOUNT	Tape mount event	4
11	TAPE_MOUNT_ERR	Tape mount error event	2
20	TAPE_POSITION	Tape position event	4
21	TAPE_POSITION_ERR	Tape position error event	2
30	TAPE_READ	Tape read event	4
31	TAPE_READ_ERR	Tape read error event	2
40	TAPE_WRITE	Tape write event	4
41	TAPE_WRITE_ERR	Tape write error event	2
50	TAPE_DISMOUNT	Tape dismount event	4
51	TAPE_DISMOUNT_ERR	Tape dismount error event	2
60	TAPE_EJECT	Tape eject event	3
61	TAPE_EJECT_ERR	Tape eject error event	2
70	TAPE_UNLOAD	Tape unload event	4
71	TAPE_UNLOAD_ERR	Tape unload error event	2
72	TAPE_IMPORT	Tape import event	3
73	TAPE_EXPORT	Tape export event	3
80	TAPE_DRIVE_CLEAN_ALERT	Tape drive clean event	3
81	TAPE_DRIVE_TENSION_NOTIFY	Tape drive tension notify event	2
82	TAPE_DRIVE_LOG_ALERT	Tape drive log alert event	4
83	TAPE_DRIVE_LIST	Tape drive list event	4
84	TAPE_END_OF_TAPE	End of tape event	4
90	TAPE_REPACK	Tape repack event	3
91	TAPE_REPACK_ERR	Tape repack error event	2
103	DISK_READ	Disk read event	4
104	DISK_READ_ERR	Disk read error event	2
105	DISK_WRITE	Disk write event	4

Event ID	Name	Description	Severity
106	DISK_WRITE_ERR	Disk write error event	2
110	SD_READ	Server read event	4
111	SD_READ_ERR	Server read error event	2
112	SD_WRITE	Server write event	4
113	SD_WRITE_ERR	Server write error event	2
120	ARCHIVE_REQUEST	Archive Object event	4
122	COPY_REQUEST	Copy Instance event	4
124	COPY_AS_REQUEST	Copy As event	4
126	RESTORE	Restore Object event	4
130	DELETE_OBJECT	Delete Object event	4
132	CREATE_INSTANCE	Create Instance event	4
134	DELETE_INSTANCE	Delete Object Instance event	4
141	TRANSCODE_END	Transcode event	4
142	TRANSCODE_ERR	Transcode error event	2
160	REQUEST_STOP_ON_CANCEL	Job Cancel event	4
161	REQUEST_STOP_ON_INTERRUPT	Job Interrupt Event	4
170	LIBRARY_LOG_ALERT	Library Log alert event	4
180	CHECKSUM_ERROR_TAPE	Checksum verification error reading from tape	2
181	CHECKSUM_ERROR_DISK	Checksum verification error reading from disk	2
182	CHECKSUM_ERROR_SD	Checksum verification error reading from Server	2
190	PARTIAL_RESTORE	Partial File Restore event	4

Metric Definitions

The following list describes the DIVA Core metrics definitions. All listed metrics are enabled.

ACTOR_READ_WRITE

- Description: Actor - the amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Actor Name
- Collection Interval: Lifetime

ACTOR_READ_WRITE_ABORTED_NUMBER

- Description: Actor - number of ABORTED READ and ABORTED WRITE operations with drives.
- Events: TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Actor Name
- Collection Interval: Lifetime

ACTOR_READ_WRITE_ABORTED_NUMBER_DAY

- Description: Actor - number of ABORTED READ and ABORTED WRITE operations with drives.
- Events: TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Actor Name
- Collection Interval: Day

ACTOR_READ_WRITE_ABORTED_NUMBER_SD

- Description: Actor - number of ABORTED READ and ABORTED WRITE operations with Server.
- Events: SD_READ_ERR, SD_WRITE_ERR
- Operation: Count

- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Actor Name
- Collection Interval: Lifetime

ACTOR_READ_WRITE_ABORTED_NUMBER_SD_DAY

- Description: Actor - number of ABORTED READ and ABORTED WRITE operations with Server.
- Events: SD_READ_ERR, SD_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Actor Name
- Collection Interval: Day

ACTOR_READ_WRITE_DAY

- Description: Actor - amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Actor Name
- Collection Interval: Day

ACTOR_READ_WRITE_MONTH

- Description: Actor - amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Actor Name
- Collection Interval: Month

ACTOR_READ_WRITE_NUMBER

- Description: Actor - number of READ and WRITE operations.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null

- Collection Field: Event ID
- Aggregation Field: Actor Name
- Collection Interval: Lifetime

ACTOR_READ_WRITE_NUMBER_DAY

- Description: Actor - number of READ and WRITE operations.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Actor Name
- Collection Interval: Day

ACTOR_READ_WRITE_NUMBER_MONTH

- Description: Actor - number of READ and WRITE operations.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Actor Name
- Collection Interval: Month

ACTOR_TIME_ALL_OPERATION

- Description: Actor - time in all operations.
- Events: DISK_READ, DISK_READ_ERR, DISK_WRITE, DISK_WRITE_ERR, SD_READ, SD_READ_ERR, SD_WRITE, SD_WRITE_ERR, TAPE_END_OF_TAPE, TAPE_MOUNT_ERR, TAPE_POSITION, TAPE_POSITION_ERR, TAPE_READ, TAPE_READ_ERR, TAPE_UNLOAD, TAPE_UNLOAD_ERR, TAPE_WRITE, TAPE_WRITE_ERR
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Actor Name
- Collection Interval: Lifetime

ACTOR_TIME_ALL_OPERATION_DAY

- Description: Actor - time in all operations.
- Events: DISK_READ, DISK_READ_ERR, DISK_WRITE, DISK_WRITE_ERR, SD_READ, SD_READ_ERR, SD_WRITE, SD_WRITE_ERR, TAPE_END_OF_TAPE, TAPE_MOUNT_ERR, TAPE_POSITION, TAPE_POSITION_ERR, TAPE_READ, TAPE_READ_ERR, TAPE_UNLOAD, TAPE_UNLOAD_ERR, TAPE_WRITE, TAPE_WRITE_ERR
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Actor Name
- Collection Interval: Day

ACTOR_TIME_ALL_OPERATION_MONTH

- Description: Actor - time in all operations.
- Events: DISK_READ, DISK_READ_ERR, DISK_WRITE, DISK_WRITE_ERR, SD_READ, SD_READ_ERR, SD_WRITE, SD_WRITE_ERR, TAPE_END_OF_TAPE, TAPE_MOUNT_ERR, TAPE_POSITION, TAPE_POSITION_ERR, TAPE_READ, TAPE_READ_ERR, TAPE_UNLOAD, TAPE_UNLOAD_ERR, TAPE_WRITE, TAPE_WRITE_ERR
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Actor Name
- Collection Interval: Month

ACTOR_TIME_READ

- Description: Actor - time in READ operations.
- Events: DISK_READ, SD_READ, TAPE_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Actor Name
- Collection Interval: Lifetime

ACTOR_TIME_READ_DAY

- Description: Actor - time in READ operations.
- Events: DISK_READ, SD_READ, TAPE_READ
- Operation: Sum

- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Actor Name
- Collection Interval: Day

ACTOR_TIME_READ_MONTH

- Description: Actor - time in READ operations.
- Events: DISK_READ, SD_READ, TAPE_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Actor Name
- Collection Interval: Month

ACTOR_TIME_WRITE

- Description: Actor - time in WRITE operations.
- Events: DISK_WRITE, SD_WRITE, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Actor Name
- Collection Interval: Lifetime

ACTOR_TIME_WRITE_DAY

- Description: Actor - time in WRITE operations.
- Events: DISK_WRITE, SD_WRITE, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Actor Name
- Collection Interval: Day

ACTOR_TIME_WRITE_MONTH

- Description: Actor - time in WRITE operations.
- Events: DISK_WRITE, SD_WRITE, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null

- Collection Field: Duration
- Aggregation Field: Actor Name
- Collection Interval: Month

DISK_AVG_TRANSFER_RATE_READ

- Description: Disk - average transfer rate of READ.
- Events: DISK_READ
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_AVG_TRANSFER_RATE_READ_DAY

- Description: Disk - average transfer rate of READ.
- Events: DISK_READ
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_AVG_TRANSFER_RATE_READ_MONTH

- Description: Disk - average transfer rate of READ.
- Events: DISK_READ
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_AVG_TRANSFER_RATE_WRITE

- Description: Disk - average transfer rate of WRITE.
- Events: DISK_WRITE
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate

- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_AVG_TRANSFER_RATE_WRITE_DAY

- Description: Disk - average transfer rate of WRITE.
- Events: DISK_WRITE
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_AVG_TRANSFER_RATE_WRITE_MONTH

- Description: Disk - average transfer rate of WRITE.
- Events: DISK_WRITE
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_CHECKSUM_FAILURE_COUNT_DAY

- Description: Disk - checksum failure operations count.
- Events: CHECKSUM_ERROR_DISK
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_CHECKSUM_FAILURE_COUNT_MONTH

- Description: Disk - checksum failure operations count.
- Events: CHECKSUM_ERROR_DISK
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name

- Collection Interval: Month

DISK_NUMBER_READ

- Description: Disk - total number of READ operations.
- Events: DISK_READ, DISK_READ_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_NUMBER_READ_ABORTED

- Description: Disk - total number of ABORTED READ operations.
- Events: DISK_READ_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_NUMBER_READ_ABORTED_DAY

- Description: Disk - total number of ABORTED READ operations.
- Events: DISK_READ_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_NUMBER_READ_ABORTED_MONTH

- Description: Disk - total number of ABORTED READ operations.
- Events: DISK_READ_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_NUMBER_READ_DAY

- Description: Disk - total number of READ operations.
- Events: DISK_READ, DISK_READ_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_NUMBER_READ_MONTH

- Description: Disk - total number of READ operations.
- Events: DISK_READ, DISK_READ_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_NUMBER_WRITE

- Description: Disk - total number of WRITE operations.
- Events: DISK_WRITE, DISK_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_NUMBER_WRITE_ABORTED

- Description: Disk - Total number of ABORTED WRITE operations.
- Events: DISK_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_NUMBER_WRITE_ABORTED_DAY

- Description: Disk - Total number of ABORTED WRITE operations.
- Events: DISK_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_NUMBER_WRITE_ABORTED_MONTH

- Description: Disk - Total number of ABORTED WRITE operations.
- Events: DISK_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_NUMBER_WRITE_DAY

- Description: Disk - Total number of WRITE operations.
- Events: DISK_WRITE, DISK_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_NUMBER_WRITE_MONTH

- Description: Disk - Total number of WRITE operations.
- Events: DISK_WRITE, DISK_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_READ

- Description: Disk - total amount of data READ.
- Events: DISK_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_READ_DAY

- Description: Disk - total amount of data READ.
- Events: DISK_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_READ_MONTH

- Description: Disk - total amount of data READ.
- Events: DISK_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_TIME_ALL_OPERATION

- Description: Disk - total time of all operations.
- Events: DISK_READ, DISK_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_TIME_ALL_OPERATION_DAY

- Description: Disk - total time of all operations.
- Events: DISK_READ, DISK_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_TIME_ALL_OPERATION_MONTH

- Description: Disk - total time of all operations.
- Events: DISK_READ, DISK_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_TIME_READ

- Description: Disk - total time of READ operations.
- Events: DISK_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_TIME_READ_DAY

- Description: Disk - total time of READ operations.
- Events: DISK_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_TIME_READ_MONTH

- Description: Disk - total time of READ operations.
- Events: DISK_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_TIME_WRITE

- Description: Disk - total time of WRITE operations.
- Events: DISK_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_TIME_WRITE_DAY

- Description: Disk - total time of WRITE operations.
- Events: DISK_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_TIME_WRITE_MONTH

- Description: Disk - total time of WRITE operations.
- Events: DISK_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Disk Name
- Collection Interval: Month

DISK_WRITE

- Description: Disk - total amount of data WRITE.
- Events: DISK_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Disk Name
- Collection Interval: Lifetime

DISK_WRITE_DAY

- Description: Disk - total amount of data WRITE.
- Events: DISK_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Disk Name
- Collection Interval: Day

DISK_WRITE_MONTH

- Description: Disk - total amount of data WRITE.
- Events: DISK_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Disk Name
- Collection Interval: Month

SYSTEM_ACTIVE_ARCHIVE_NUMBER

- Description: DIVA Core System - number of active Archive jobs.
- Events: ARCHIVE_REQUEST
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_ACTIVE_ARCHIVE_NUMBER_DAY

- Description: DIVA Core System - number of active Archive jobs.
- Events: ARCHIVE_REQUEST
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_ACTIVE_ARCHIVE_NUMBER_MONTH

- Description: DIVA Core System - number of active Archive jobs.
- Events: ARCHIVE_REQUEST
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_ACTIVE_COPY_AS_NUMBER

- Description: DIVA Core System - number of active Copy As New object jobs.
- Events: COPY_AS_REQUEST
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_ACTIVE_COPY_AS_NUMBER_DAY

- Description: DIVA Core System - number of active Copy As New object jobs.
- Events: COPY_AS_REQUEST
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_ACTIVE_COPY_AS_NUMBER_MONTH

- Description: DIVA Core System - number of active Copy As New object jobs.
- Events: COPY_AS_REQUEST
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_ACTIVE_COPY_NUMBER

- Description: DIVA Core System - number of active Copy jobs.
- Events: COPY_REQUEST
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_ACTIVE_COPY_NUMBER_DAY

- Description: DIVA Core System - number of active Copy jobs.
- Events: COPY_REQUEST
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_ACTIVE_COPY_NUMBER_MONTH

- Description: DIVA Core System - number of active Copy jobs.
- Events: COPY_REQUEST
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_ACTIVE_RESTORE_NUMBER

- Description: DIVA Core System - number of active Restore jobs.
- Events: RESTORE
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_ACTIVE_RESTORE_NUMBER_DAY

- Description: DIVA Core System - number of active Restore jobs.
- Events: RESTORE
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_ACTIVE_RESTORE_NUMBER_MONTH

- Description: DIVA Core System - number of active Restore jobs.
- Events: RESTORE
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Number of operations
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_AVG_READ_WRITE

- Description: DIVA Core System - average amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: WAVG
- Weight Factor: Duration
- Collection Field: Transfer Size
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_AVG_READ_WRITE_DAY

- Description: DIVA Core System - average amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: WAVG
- Weight Factor: Duration
- Collection Field: Transfer Size
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_AVG_READ_WRITE_MONTH

- Description: DIVA Core System - average amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: WAVG
- Weight Factor: Duration
- Collection Field: Transfer Size
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_NUMBER_OBJECT_ARCHIVE

- Description: DIVA Core System - number of objects archived.
- Events: ARCHIVE_REQUEST
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_NUMBER_OBJECT_ARCHIVE_DAY

- Description: DIVA Core System - number of objects archived.
- Events: ARCHIVE_REQUEST
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_NUMBER_OBJECT_ARCHIVE_MONTH

- Description: DIVA Core System - number of objects archived.
- Events: ARCHIVE_REQUEST
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_NUMBER_OBJECT_CREATED

- Description: DIVA Core System - number of objects created.
- Events: ARCHIVE_REQUEST, COPY_AS_REQUEST
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_NUMBER_OBJECT_CREATED_DAY

- Description: DIVA Core System - number of objects created.
- Events: ARCHIVE_REQUEST, COPY_AS_REQUEST
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_NUMBER_OBJECT_CREATED_MONTH

- Description: DIVA Core System - number of objects created.
- Events: ARCHIVE_REQUEST, COPY_AS_REQUEST
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_NUMBER_OBJECT_DELETED

- Description: DIVA Core System - number of objects deleted.
- Events: DELETE_OBJECT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_NUMBER_OBJECT_DELETED_DAY

- Description: DIVA Core System - number of objects deleted.
- Events: DELETE_OBJECT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_NUMBER_OBJECT_DELETED_MONTH

- Description: DIVA Core System - number of objects deleted.
- Events: DELETE_OBJECT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_NUMBER_OBJECT_INSTANCE_COPY

- Description: DIVA Core System - number of objects instance copied.
- Events: COPY_REQUEST
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_NUMBER_OBJECT_INSTANCE_COPY_DAY

- Description: DIVA Core System - number of objects instance copied.
- Events: COPY_REQUEST
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_NUMBER_OBJECT_INSTANCE_COPY_MONTH

- Description: DIVA Core System - number of objects instance copied.
- Events: COPY_REQUEST
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_NUMBER_OBJECT_INSTANCE_CREATED

- Description: DIVA Core System - number of object instances created.
- Events: CREATE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_NUMBER_OBJECT_INSTANCE_CREATED_DAY

- Description: DIVA Core System - number of object instances created.
- Events: CREATE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_NUMBER_OBJECT_INSTANCE_CREATED_MONTH

- Description: DIVA Core System - number of object instances created.
- Events: CREATE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_NUMBER_OBJECT_INSTANCE_DELETED

- Description: DIVA Core System - number of object instances deleted.
- Events: DELETE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_NUMBER_OBJECT_INSTANCE_DELETED_DAY

- Description: DIVA Core System - number of object instances deleted.
- Events: DELETE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_NUMBER_OBJECT_INSTANCE_DELETED_MONTH

- Description: DIVA Core System - number of object instances deleted.
- Events: DELETE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_NUMBER_OBJECT_RESTORE

- Description: DIVA Core System - number of objects restored.
- Events: RESTORE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_NUMBER_OBJECT_RESTORE_DAY

- Description: DIVA Core System - number of objects restored.
- Events: RESTORE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_NUMBER_OBJECT_RESTORE_MONTH

- Description: DIVA Core System - number of objects restored.
- Events: RESTORE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_READ_WRITE

- Description: DIVA Core System - amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_READ_WRITE_ABORTED_NUMBER

- Description: DIVA Core System - number of ABORTED READ and ABORTED WRITE operations.
- Events: DISK_READ_ERR, DISK_WRITE_ERR, SD_READ_ERR, SD_WRITE_ERR, TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_READ_WRITE_ABORTED_NUMBER_DAY

- Description: DIVA Core System - number of ABORTED READ and ABORTED WRITE operations.
- Events: DISK_READ_ERR, DISK_WRITE_ERR, SD_READ_ERR, SD_WRITE_ERR, TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_READ_WRITE_ABORTED_NUMBER_MONTH

- Description: DIVA Core System - number of ABORTED READ and ABORTED WRITE operations.
- Events: DISK_READ_ERR, DISK_WRITE_ERR, SD_READ_ERR, SD_WRITE_ERR, TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_READ_WRITE_DAY

- Description: DIVA Core System - amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_READ_WRITE_MONTH

- Description: DIVA Core System - amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

SYSTEM_READ_WRITE_NUMBER

- Description: DIVA Core System - number of READ and WRITE operations.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

SYSTEM_READ_WRITE_NUMBER_DAY

- Description: DIVA Core System - number of READ and WRITE operations.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Day

SYSTEM_READ_WRITE_NUMBER_MONTH

- Description: DIVA Core System - number of READ and WRITE operations.
- Events: DISK_READ, DISK_WRITE, SD_READ, SD_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Month

MEDIA_ARCHIVED_OBJECT_DATASIZE_DAY

- Description: Media - data size of all objects archived.
- Events: ARCHIVE_REQUEST
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Media Name
- Collection Interval: Day

MEDIA_ARCHIVED_OBJECT_DATASIZE_MONTH

- Description: Media - data size of all objects archived.
- Events: ARCHIVE_REQUEST
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Media Name
- Collection Interval: Month

MEDIA_OBJECT_INSTANCE_CREATE

- Description: Media - number of object instance CREATE.
- Events: CREATE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Lifetime

MEDIA_OBJECT_INSTANCE_CREATE_DAY

- Description: Media - number of object instance CREATE.
- Events: CREATE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Day

MEDIA_OBJECT_INSTANCE_CREATE_MONTH

- Description: Media - number of object instance CREATE and DELETE.
- Events: CREATE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Month

MEDIA_OBJECT_INSTANCE_DELETE

- Description: Media - number of object instance DELETE.
- Events: DELETE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Lifetime

MEDIA_OBJECT_INSTANCE_DELETE_DAY

- Description: Media - number of object instance DELETE.
- Events: DELETE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Day

MEDIA_OBJECT_INSTANCE_DELETE_MONTH

- Description: Media - number of object instance CREATE and DELETE.
- Events: DELETE_INSTANCE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Month

MEDIA_READ_WRITE

- Description: Media - amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Media Name
- Collection Interval: Lifetime

MEDIA_READ_WRITE_DAY

- Description: Media - amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Media Name
- Collection Interval: Day

MEDIA_READ_WRITE_MONTH

- Description: Media - amount of data READ and WRITE.
- Events: DISK_READ, DISK_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Media Name
- Collection Interval: Month

MEDIA_READ_WRITE_NUMBER

- Description: Media - number of READ and WRITE operations.
- Events: DISK_READ, DISK_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Lifetime

MEDIA_READ_WRITE_NUMBER_DAY

- Description: Media - number of READ and WRITE operations.
- Events: DISK_READ, DISK_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Day

MEDIA_READ_WRITE_NUMBER_MONTH

- Description: Media - number of READ and WRITE operations.
- Events: DISK_READ, DISK_WRITE, TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Month

MEDIA_RESTORE_OBJECT_DATASIZE_DAY

- Description: Media - data size of all objects restored.
- Events: RESTORE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Media Name
- Collection Interval: Day

MEDIA_RESTORE_OBJECT_DATASIZE_MONTH

- Description: Media - data size of all objects restored.
- Events: RESTORE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Media Name
- Collection Interval: Month

MEDIA_TAPE_EXPORT_NUMBER_DAY

- Description: Media - Number of tape EXPORT.
- Events: TAPE_EXPORT
- Operation: count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Day

MEDIA_TAPE_EXPORT_NUMBER_MONTH

- Description: Media - Number of tape EXPORT.
- Events: TAPE_EXPORT
- Operation: count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Month

MEDIA_TAPE_IMPORT_NUMBER_DAY

- Description: Media - Number of tape IMPORT.
- Events: TAPE_IMPORT
- Operation: count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Day

MEDIA_TAPE_EXPORT_NUMBER_MONTH

- Description: Media - Number of tape IMPORT.
- Events: TAPE_IMPORT
- Operation: count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Media Name
- Collection Interval: Month

SD_ARCHIVE_OBJECT_DATASIZE_DAY

- Description: Server - data size of all objects archived.
- Events: ARCHIVE_REQUEST
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Day

SD_ARCHIVE_OBJECT_DATASIZE_MONTH

- Description: Server - data size of all objects archived.
- Events: ARCHIVE_REQUEST
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Month

SD_CHECKSUM_FAILURE_COUNT_DAY

- Description: Server - checksum failure operations count.
- Events: CHECKSUM_ERROR_SD
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Server Name
- Collection Interval: Day

SD_READ

- Description: Server - amount of data READ.
- Events: SD_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Lifetime

SD_READ_DAY

- Description: Server - amount of data READ.
- Events: SD_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Day

SD_READ_MONTH

- Description: Server - amount of data READ.
- Events: SD_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Month

SD_READ_NUMBER

- Description: Server - number of READ operations.
- Events: SD_READ
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Server Name
- Collection Interval: Lifetime

SD_READ_NUMBER_DAY

- Description: Server - number of READ operations.
- Events: SD_READ
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Server Name
- Collection Interval: Day

SD_READ_NUMBER_MONTH

- Description: Server - number of READ operations.
- Events: SD_READ
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Server Name
- Collection Interval: Month

SD_RESTORE_OBJECT_DATASIZE_DAY

- Description: Server - data size of all objects restore.
- Events: RESTORE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Day

SD_RESTORE_OBJECT_DATASIZE_MONTH

- Description: Server - data size of all objects restore.
- Events: RESTORE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Month

SD_TIME

- Description: Server - time in operation.
- Events: SD_READ, SD_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Server Name
- Collection Interval: Lifetime

SD_TIME_DAY

- Description: Server - time in operation.
- Events: SD_READ, SD_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Server Name
- Collection Interval: Day

SD_TIME_MONTH

- Description: Server - time in operation.
- Events: SD_READ, SD_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Server Name
- Collection Interval: Month

SD_WRITE

- Description: Server - amount of data WRITE.
- Events: SD_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Lifetime

SD_WRITE_DAY

- Description: Server - amount of data WRITE.
- Events: SD_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Day

SD_WRITE_MONTH

- Description: Server - amount of data WRITE.
- Events: SD_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Server Name
- Collection Interval: Month

SD_WRITE_NUMBER

- Description: Server - number of WRITE operations.
- Events: SD_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Server Name
- Collection Interval: Lifetime

SD_WRITE_NUMBER_DAY

- Description: Server - number of WRITE operations.
- Events: SD_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Server Name
- Collection Interval: Day

SD_WRITE_NUMBER_MONTH

- Description: Server - number of WRITE operations.
- Events: SD_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Server Name
- Collection Interval: Month

TAPE_CHECKSUM_FAILURE_COUNT_DAY

- Description: Tape - checksum failure operations count.
- Events: CHECKSUM_ERROR_TAPE, TAPE_DISMOUNT_ERR, TAPE_MOUNT_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Tape Barcode
- Collection Interval: Day

TAPE_DRIVE_DATA_RATE

- Description: Tape Drive - data rate
- Events: TAPE_READ, TAPE_WRITE
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Drive Serial Number
- Collection Interval: Day

TAPE_DRIVE_DATA_RATE_MONTH

- Description: Tape Drive - data rate
- Events: TAPE_READ, TAPE_WRITE
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Drive Serial Number
- Collection Interval: Month

TAPE_DRIVE_ERROR_RATE

- Description: Tape Drive - internal error rate.
- Events: TAPE_READ, TAPE_WRITE
- Operation: Average
- Weight Factor: Null
- Collection Field: Error Rate
- Aggregation Field: Drive Serial Number
- Collection Interval: Day

TAPE_DRIVE_ERROR_RATE_MONTH

- Description: Tape Drive - internal error rate.
- Events: TAPE_READ, TAPE_WRITE
- Operation: Average
- Weight Factor: Null
- Collection Field: Error Rate
- Aggregation Field: Drive Serial Number
- Collection Interval: Month

TAPE_DRIVE_LAST_OPERATION_DATE

- Description: Tape Drive - date of last MOUNT, DISMOUNT, READ, or WRITE.
- Events: TAPE_DISMOUNT, TAPE_MOUNT, TAPE_READ, TAPE_WRITE
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Event Time
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_NUMBER_MOUNTS

- Description: Tape Drive - number of mounts.
- Events: TAPE_MOUNT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_NUMBER_MOUNT_DISMOUNT_ABORTED

- Description: Tape Drive - number of terminated MOUNT and DISMOUNT operations (together).
- Events: TAPE_DISMOUNT_ERR, TAPE_MOUNT_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_NUMBER_READ_WRITE_ABORTED

- Description: Tape Drive - number of terminated READ and WRITE operations (together).
- Events: TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_NUMBER_READ_WRITE_ABORTED_DAY

- Description: Tape Drive - number of terminated READ and WRITE operations (together).
- Events: TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Drive Serial Number
- Collection Interval: Day

TAPE_DRIVE_NUMBER_READ_WRITE_ABORTED_MONTH

- Description: Tape Drive - number of terminated READ and WRITE operations (together).
- Events: TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Drive Serial Number

- Collection Interval: Month

TAPE_DRIVE_OPERATION_TOTAL_TIME

- Description: Tape Drive - total time of drive operation.
- Events: TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_OPERATION_TOTAL_TIME_DAY

- Description: Tape Drive - total time of drive operation.
- Events: TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Day

TAPE_DRIVE_READ_WRITE

- Description: Tape Drive - amount of data READ and WRITE (together).
- Events: TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_READ_WRITE_DAY

- Description: Tape Drive - amount of data READ and WRITE (together).
- Events: TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Drive Serial Number
- Collection Interval: Day

TAPE_DRIVE_READ_WRITE_MONTH

- Description: Tape Drive - amount of data READ and WRITE (together).
- Events: TAPE_READ, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Drive Serial Number
- Collection Interval: Month

TAPE_DRIVE_READ_WRITE_NUMBER

- Description: Tape Drive - number of READ and WRITE operations (together).
- Events: TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_READ_WRITE_NUMBER_DAY

- Description: Tape Drive - number of READ and WRITE operations (together).
- Events: TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Drive Serial Number
- Collection Interval: Day

TAPE_DRIVE_READ_WRITE_NUMBER_MONTH

- Description: Tape Drive - number of READ and WRITE operations (together).
- Events: TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Drive Serial Number
- Collection Interval: Month

TAPE_DRIVE_TIME_ALL_OPERATION

- Description: Tape Drive - time in all operations.
- Events: TAPE_DISMOUNT, TAPE_EJECT, TAPE_INSERT, TAPE_MOUNT, TAPE_POSITION, TAPE_READ, TAPE_UNLOAD, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_TIME_ALL_OPERATION_DAY

- Description: Tape Drive - time in all operations.
- Events: TAPE_DISMOUNT, TAPE_EJECT, TAPE_INSERT, TAPE_MOUNT, TAPE_POSITION, TAPE_READ, TAPE_UNLOAD, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Day

TAPE_DRIVE_TIME_ALL_OPERATION_MONTH

- Description: Tape Drive - time in all operations.
- Events: TAPE_DISMOUNT, TAPE_EJECT, TAPE_INSERT, TAPE_MOUNT, TAPE_POSITION, TAPE_READ, TAPE_UNLOAD, TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Month

TAPE_DRIVE_TIME_READ

- Description: Tape Drive - time in READ operation.
- Events: TAPE_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_TIME_READ_DAY

- Description: Tape Drive - time in READ operation.
- Events: TAPE_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Day

TAPE_DRIVE_TIME_READ_MONTH

- Description: Tape Drive - time in READ operation.
- Events: TAPE_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Month

TAPE_DRIVE_TIME_WRITE

- Description: Tape Drive - time in WRITE operation.
- Events: TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Lifetime

TAPE_DRIVE_TIME_WRITE_DAY

- Description: Tape Drive - time in WRITE operation.
- Events: TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Day

TAPE_DRIVE_TIME_WRITE_MONTH

- Description: Tape Drive - time in WRITE operation.
- Events: TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Drive Serial Number
- Collection Interval: Month

TAPE_EXTERNALIZATION_NUMBER

- Description: Tape - number of externalizations.
- Events: TAPE_EJECT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_LAST_DISMOUNT

- Description: Tape - date of last DISMOUNT.
- Events: TAPE_DISMOUNT
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Event Time
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_LAST_EVENT_ID

- Description: Tape - the Analytics App Event ID of the last Tape or Drive operation.
- Events: TAPE_DISMOUNT, TAPE_DISMOUNT_ERR, TAPE_MOUNT, TAPE_MOUNT_ERR, TAPE_POSITION, TAPE_POSITION_ERR, TAPE_READ, TAPE_READ_ERR, TAPE_UNLOAD, TAPE_UNLOAD_ERR, TAPE_WRITE, TAPE_WRITE_ERR
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_LAST_MOUNT_DATE

- Description: Tape - date of last MOUNT.
- Events: TAPE_MOUNT
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Event Time
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_LAST_READ

- Description: Tape - date of last READ.
- Events: TAPE_READ
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Event Time
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_LAST_WRITE

- Description: Tape - date of last WRITE.
- Events: TAPE_WRITE
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Event Time
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_LIBRARY_NUMBER_DISMOUNT_ABORTED

- Description: Tape Library - total number of ABORTED DISMOUNT operations.
- Events: TAPE_DISMOUNT_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Lifetime

TAPE_LIBRARY_NUMBER_DISMOUNT_ABORTED_DAY

- Description: Tape Library - total number of ABORTED DISMOUNT operations.
- Events: TAPE_DISMOUNT_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Day

TAPE_LIBRARY_NUMBER_DISMOUNT_ABORTED_MONTH

- Description: Tape Library - total number of ABORTED DISMOUNT operations.
- Events: TAPE_DISMOUNT_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Month

TAPE_LIBRARY_NUMBER_MOUNT

- Description: Tape Library - total number of MOUNT operations.
- Events: TAPE_MOUNT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Lifetime

TAPE_LIBRARY_NUMBER_MOUNT_ABORTED

- Description: Tape Library - total number of ABORTED MOUNT operations.
- Events: TAPE_MOUNT_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Lifetime

TAPE_LIBRARY_NUMBER_MOUNT_ABORTED_DAY

- Description: Tape Library - total number of ABORTED MOUNT operations.
- Events: TAPE_MOUNT_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Day

TAPE_LIBRARY_NUMBER_MOUNT_ABORTED_MONTH

- Description: Tape Library - total number of ABORTED MOUNT operations.
- Events: TAPE_MOUNT_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Month

TAPE_LIBRARY_NUMBER_MOUNT_DAY

- Description: Tape Library - total number of MOUNT operations.
- Events: TAPE_MOUNT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Day

TAPE_LIBRARY_NUMBER_MOUNT_MONTH

- Description: Tape Library - total number of MOUNT operations.
- Events: TAPE_MOUNT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Month

TAPE_LIBRARY_NUMBER_READ

- Description: Tape Library - total number of READ operations.
- Events: TAPE_READ, TAPE_READ_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Lifetime

TAPE_LIBRARY_NUMBER_READ_DAY

- Description: Tape Library - total number of READ operations.
- Events: TAPE_READ, TAPE_READ_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Day

TAPE_LIBRARY_NUMBER_READ_MONTH

- Description: Tape Library - total number of READ operations.
- Events: TAPE_READ, TAPE_READ_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Month

TAPE_LIBRARY_NUMBER_WRITE

- Description: Tape Library - total number of WRITE operations.
- Events: TAPE_WRITE, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Lifetime

TAPE_LIBRARY_NUMBER_WRITE_DAY

- Description: Tape Library - total number of WRITE operations.
- Events: TAPE_WRITE, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Day

TAPE_LIBRARY_NUMBER_WRITE_MONTH

- Description: Tape Library - total number of WRITE operations.
- Events: TAPE_WRITE, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Library Serial Number
- Collection Interval: Month

TAPE_LIBRARY_READ

- Description: Tape Library - total amount of data READ operations.
- Events: TAPE_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Library Serial Number
- Collection Interval: Lifetime

TAPE_LIBRARY_READ_DAY

- Description: Tape Library - total amount of data READ operations.
- Events: TAPE_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Library Serial Number
- Collection Interval: Day

TAPE_LIBRARY_READ_MONTH

- Description: Tape Library - total amount of data READ operations.
- Events: TAPE_READ
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Library Serial Number
- Collection Interval: Month

TAPE_LIBRARY_WRITE

- Description: Tape Library - total amount of data WRITE operations.
- Events: TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Library Serial Number
- Collection Interval: Lifetime

TAPE_LIBRARY_WRITE_DAY

- Description: Tape Library - total amount of data WRITE operations.
- Events: TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Library Serial Number
- Collection Interval: Day

TAPE_LIBRARY_WRITE_MONTH

- Description: Tape Library - total amount of data WRITE operations.
- Events: TAPE_WRITE
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Library Serial Number
- Collection Interval: Month

TAPE_MOUNT_DISMOUNT_NUMBER

- Description: Tape - number of MOUNT and DISMOUNT operations (together).
- Events: TAPE_DISMOUNT, TAPE_MOUNT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_MOUNT_NUMBER

- Description: Tape - number of MOUNT operations.
- Events: TAPE_MOUNT
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_READ_WRITE_ABORTED_NUMBER

- Description: Tape - number of aborted READ and WRITE operations (together).
- Events: TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_READ_WRITE_ABORTED_NUMBER_DAY

- Description: Tape - number of aborted READ and WRITE operations (together).
- Events: TAPE_READ_ERR, TAPE_WRITE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Tape Barcode
- Collection Interval: Day

TAPE_READ_WRITE_NUMBER

- Description: Tape - number of READ and WRITE operations.
- Events: TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Tape Barcode
- Collection Interval: Lifetime

TAPE_READ_WRITE_NUMBER_DAY

- Description: Tape - number of READ and WRITE operations.
- Events: TAPE_READ, TAPE_WRITE
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Tape Barcode
- Collection Interval: Day

TAPE_REPACK_NUMBER

- Description: Tape - number of REPACK, REUSE and REFORMAT operations (together).
- Events: TAPE_REPACK
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Local DIVA Core System
- Collection Interval: Lifetime

TRANSCODE_ABORTED_NUMBER

- Description: Transcoder - number ABORTED TRANSCODE operations.
- Events: TRANSCODE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Lifetime

TRANSCODE_ABORTED_NUMBER_DAY

- Description: Transcoder - number ABORTED TRANSCODE operations.
- Events: TRANSCODE_ERR
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Day

TRANSCODE_AVG_DATA

- Description: Transcoder - average amount of data transcoded.
- Events: TRANSCODE_END
- Operation: Weighted Average
- Weight Factor: Duration
- Collection Field: Transfer Size
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Lifetime

TRANSCODE_AVG_DATA_DAY

- Description: Transcoder - average amount of data transcoded.
- Events: TRANSCODE_END
- Operation: Weighted Average
- Weight Factor: Duration
- Collection Field: Transfer Size
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Day

TRANSCODE_AVG_THROUGHPUT

- Description: Transcoder - average transcoding throughput.
- Events: TRANSCODE_END
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Lifetime

TRANSCODE_AVG_THROUGHPUT_DAY

- Description: Transcoder - average transcoding throughput.
- Events: TRANSCODE_END
- Operation: Average
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Day

TRANSCODE_DATA

- Description: Transcoder - amount of data transcoded.
- Events: TRANSCODE_END
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Lifetime

TRANSCODE_DATA_DAY

- Description: Transcoder - amount of data transcoded.
- Events: TRANSCODE_END
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Day

TRANSCODE_DATA_MONTH

- Description: Transcoder - amount of data transcoded.
- Events: TRANSCODE_END
- Operation: Sum
- Weight Factor: Null
- Collection Field: Transfer Size
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Month

TRANSCODE_MAX_THROUGHPUT

- Description: Transcoder - maximum transcoding throughput.
- Events: TRANSCODE_END
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Lifetime

TRANSCODE_MAX_THROUGHPUT_DAY

- Description: Transcoder - maximum transcoding throughput.
- Events: TRANSCODE_END
- Operation: Maximum
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Day

TRANSCODE_MIN_THROUGHPUT

- Description: Transcoder - minimum transcoding throughput.
- Events: TRANSCODE_END
- Operation: Minimum
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Lifetime

TRANSCODE_MIN_THROUGHPUT_DAY

- Description: Transcoder - minimum transcoding throughput.
- Events: TRANSCODE_END
- Operation: Minimum
- Weight Factor: Null
- Collection Field: Transfer Rate
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Day

TRANSCODE_NUMBER

- Description: Transcoder - number of TRANSCODE operations.
- Events: TRANSCODE_END
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Lifetime

TRANSCODE_NUMBER_DAY

- Description: Transcoder - number of TRANSCODE operations.
- Events: TRANSCODE_END
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Day

TRANSCODE_NUMBER_MONTH

- Description: Transcoder - number of TRANSCODE operations.
- Events: TRANSCODE_END
- Operation: Count
- Weight Factor: Null
- Collection Field: Event ID
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Month

TRANSCODE_TIME

- Description: Transcoder - time in TRANSCODE operation.
- Events: TRANSCODE_END
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Lifetime

TRANSCODE_TIME_DAY

- Description: Transcoder - time in TRANSCODE operation.
- Events: TRANSCODE_END
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Day

TRANSCODE_TIME_MONTH

- Description: Transcoder - time in TRANSCODE operation.
- Events: TRANSCODE_END
- Operation: Sum
- Weight Factor: Null
- Collection Field: Duration
- Aggregation Field: Transcoder Name or Analyzer Name
- Collection Interval: Month

Default Configuration Parameters

You configure the Analytics App parameters on the System Management App the Analytics App tab. The default the Analytics App configuration parameters are as follows:

Parameter	Default	Values
DIVA Core: Enable/Disable Analytics App Data Collection	Enabled	Enabled or Disabled
DIVA Core: Size Triggering Event Queue DB Flush (number of events)	100	Integer
DIVA Core: Time Delay Triggering Event Queue DB Flush (seconds)	15	Integer
Conf Utility GUI: Enable/Disable Analytics App Configuration	Enabled	Enabled or Disabled
DB: Maximum possible history of Events in Months	12	Integer
DB: Maximum possible number of Metrics	1,000,000	Integer

Glossary

Action

A predetermined reaction of a metric surpassing a threshold value by one of the variables from its internal state.

Events

A data element containing all facts (names, IDs, parameters, numbers, and so on) related to one occurrence of an operation inside the DIVA Core system. For example, Tape Read Complete, or Tape Eject Complete.

Journal

A self-maintained, automated, and configurable storage for **Events**.

Measurement

A reading of specific information from an Event or a **Resource**. For example, the duration of a disk write operation, or the occurrence of a read error on a tape drive.

Metrics

An instance of one **Metric Definition** for a specific **Resource**. Each metric is associated with a specific resource and can receive a flow of measurements from that attached resource.

A metric has an internal state that consists of several numeric values that it updates on its own when given new measurements. It provides read access to this logically consistent state. Each metric can be used as a measurement value for the state of another metric. You can reset the internal state at any time. You can also enable or disable metrics.

Metric Definition

Defines how a Metric is calculated by specifying which Events are examined, which Measurements are extracted, how they are aggregated (Collection Type), and which Resource the aggregation is based on. See *Event and Metric Definitions* for predefined metrics in the system.

Metric Type

The metric types are as follows:

- Hourly metric types are calculated every hour for the associated resource.

- Daily metric types are calculated every day for the associated resource.
- Monthly metric types are calculated every month for the associated resource.
- Yearly metric types are calculated every year for the associated resource.
- Lifetime metric types are calculated throughout the lifetime of the associated resource.

Resource

A uniquely identified element of the DIVA Core system made available to the Analytics App. **Events** and **Metrics** identify the resources. The following are examples of resources in DIVA Core:

- Tape with Barcode ABE6785
- DIVA Core Actor Actor01
- Tape Drive Serial Number 134001021

Resource Type

These are generic types of resources. For example, tapes, tape drives, DIVA Core jobs, or objects.