



# **Release Notes**

Release 8.3.x

Version 1.2

This document provides product release information for the DIVA Core Suite releases 8.x.

**Note:** Read this documentation before installing and using DIVA Core.

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#### **Overview**

This guide is written for video professionals who are familiar with configuring and using the DIVA Core Suite of products. It includes information on new and improved features and functionality. You should have knowledge of the DIVA Core products to successfully upgrade your installation. If you are not familiar with the DIVA Core products, we suggest that you review the DIVA Core Supported Environments Guide, DIVA Core Installation and Configuration Guide, and DIVA Core Operations Guide as needed.

**Note:** DIVA Command has been deprecated.

# Installing, Configuring, or Updating DIVA Core

Contact Telestream Support for assistance installing, updating, or configuring DIVA Core. The Telestream Support Contacts Global Directory can be found at:

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

For more information, see the DIVA Core documentation set for this release located at: https://www.telestream.net/telestream-support/diva/support.htm

#### **Options and Licensing**

DIVA Core 8.x requires a license. DIVA Core will not start without a valid license in the Core Database. The details of the license, and tool used to create the license have been updated. The license can be imported as part of the DIVA Core installer if you create the license before DIVA Core is installed. If DIVA Core is already installed, a license can be imported using the Configuration Utility. In addition to enabling DIVA Core, the license includes a set of options that are necessary to enable the associated features in DIVA Core. The following table identifies DIVA Core options and licensing metrics.

Description	Licensing Metric
DIVA Core System	Per Server
DIVA Core Single	Per Server
DIVA Core Actor	Per Server
DIVA Core Avid Connector	Per Avid Archive Provider
DIVA Core Partial File Restore	Per System
DIVA Core Analytics	Per Server
DIVA View	Per Concurrent User
Managed Storage Capacity	Per 500 TB Block



Unlimited Storage Capacity Per System	Unlimited Storage Capacity	Per System	
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## **Security**

Telestream recommends keeping the operating system up to date with the latest security patches. However, Telestream cannot guarantee that all patches will operate correctly with DIVA Core because the operating system security patches are independent of the DIVA Core application.

You should determine the acceptable operating system security patch level for your environment. Contact Telestream Support for assistance in determining operating system patch level compatibility if necessary.



DIVA Core 8.3.1 includes the following new features and enhancements:

#### **Object Auto-Indexing**

This feature has been designed to detect files from a cloud bucket or a bucket subdirectory, create an AXF reference-file metadata file and index them as new objects in the Core Database. The data files are not transferred by DIVA, they are just indexed as they are on the managed cloud bucket. Refer to the DIVA Core Installation and Configuration Guide for detailed information on currently supported cloud providers.

#### **System Management App Updates**

The following updates have been made to the System Management App:

#### **Library Storage**

- Library Storage has been added to the configuration section to allow libraries to be configured in the app.
- Core Actor connections can be added to the currently selected drive by clicking the Add Actor Connection button.
- The Connected Actors page displays all Actor connections to all drives in the system.
- The Media Compatibilities page displays the Media Compatibilities that have been detected and configured by Synchronize DB.
- The Tape Types section displays the tape media types in the system that were detected when performing Synchronize DB.
- The Tape Groups section displays the Tape Groups currently defined in the system. Actions available are Add, Edit, Clone, and Delete.

#### **Download CSV**

• All table views in the app have been enhanced to offer a Download CSV option. The option is available from a button in the area where the Table View buttons, such as displayed columns and their widths, are located.

#### **Actors and Drive Alternative View**

Both Actors and Drives in Resources Management have been enhanced to show not just the original panel per item view, but also a table view. The current view is controlled by a button in the Table View control area to toggle between the two views. The last view used by the user is preserved and used the next time the table is loaded.



DIVA Core 8.3 includes the following new features and enhancements:

#### **S3 Server Side Encryption**

DIVA Core 8.3 includes support for S3 server side encryption (SSE). These two encryption key management are supported:

- SSE with Amazon S3-Managed Keys (SSE-S3) and Alibaba managed keys (SSE-OSS)
- SSE with KMS keys Stored in AWS or Alibaba Key Management Service (SSE-KMS)

#### **Cloud Bucket Scanning Support**

DIVA Core can now scan a cloud bucket, detect AXF instances (self-contained and reference-file) and populate the database from instances created by a foreign DIVA or by a bucket replication process.

#### **Alto Disk Archive Support**

Native support for Alto Disk Archive (like tape libraries) has been added. All tape related functionalities are supported with Alto libraries.

For example: Eject, Export, Spanning, Repack, Verify Tape, Tape cloning, and so on.

#### **Temporary Filenames**

Å new option has been implemented to use a temporary filename when restoring files to a destination: -restore\_to\_temp\_files. Temporary files are then renamed at the end of the transfer to their target name.

#### **DIVA Core Backup Service (BKS)**

The following updates have been made to BKS in the DIVA Core 8.3 release:

- Support for PostgreSQL
- Media archiving for database backups to Tape Groups or Disk Arrays
- Automated restoration of database backups from Media archive
- Support for manual restoration of external backups
- Support for daily, weekly, and monthly scheduling
- Database ledgers are now distributed among backup locations
- Support for DIVA Core notifications
- Email notification for backup events and archive lists
- Backup replication among backup locations can now be specified per database
- Support for long term database backup archives that are permanently kept in the Media archive



• Improvements in operational logging

## **DIVA Core System Management App**

#### **Home Page**

A new default home page has been added to the Web UI. It is designed to give a quick overview of the system and it's usage, and displays the following four panels;

- System Info
- Utilization Stats
- Alerts
- Storage Resource

#### **Archive Submission**

The Archive submission button, which opened a form, has been removed from the Catalog Browsing page, and a new dedicated page has been added for this action.

#### **Banner Shortcuts**

Various page shortcuts for regularly visited pages have been added to the banner for easier navigation.



DIVA Core 8.2 includes the following new features and enhancements:

#### **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.

- 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

## **Support for Oracle 19c**

Oracle 19c can be used with DIVA Core 8.0 and later, and supports the following Windows and Linux Oracle packages:

- OracleDivaDB\_3-2-0\_19\_3\_0\_0\_0\_SE2\_Windows\_64-bit
- OracleDivaDB\_3-3-0\_19\_3\_0\_0\_0\_SE2\_Linux\_x86\_64

### **Operating Systems**

DIVA Core 8.2 and later includes support for system installations in the Windows 2012 R2, 2016, and 2019, 2022, and Oracle Linux 7 x86 64 or later (64-bit) environments.



#### System Management App, Control GUI, & Configuration Utility

The decision was made to revert back to the original DIVA Core Configuration Utility and to deprecate DIVA Command. The Configuration Utility and Control GUI are now named System Management App.

#### **System Management App**

DIVA Core System Management App is installed as part of DIVA Core 8.2.0.255 installer (or later). It is hosted by the Core Manager Service. Installing the DIVA Core and the REST API Data services will automatically configure it. Refer to the REST API Installation and Configuration section in the DIVA Core 8.2 Installation and Configuration Guide for instructions.

The REST API Discovery and Gateway services do not need to be installed to use DIVA Core System Management App.

#### **Notification Service (RabbitMQ)**

RabbitMQ has been integrated into the DIVA Core windows installer starting with release 8.2.0.91 (and later). The DIVA Core installer identifies it as Notification Service instead of RabbitMQ because RabbitMQ is just an implementation.

The Notification Service is required for the System Management App to function properly.

#### Added HCP (Hitachi Content Platform) Support

Added support for Hitachi Content Platform (HCP). This is a new kind of S3 Supported Object Storage. See the DIVA Core 8.2 Supported Environments Guide for more details.

- Object Storage Type: Hitachi Content Platform (HCP)
- Protocol: S3
- Supported Storage Classes: Standard
- Managed Storage: Yes
- · AXF Reference-File: Yes
- · Server: Yes
- · Disk Instance Recovery: Currently not tested

## **Support for LTFS\_AXF\_1.1 Format**

This new format offers the same features as AXF\_1.1 on an LTFS formatted Tape Group and is only supported on tape. This format is not recommended for complex objects because it would generate very large LTFS indexes. The following features are supported by LTFS AXF:

- Spanning
- Drive compression



• Drive encryption is supported but not recommended if there is no procedure to export and load encryption keys to the LTFS software.

See the DIVA Core 8.2 Operations Guide for more information.

#### **Updated Support for AXF\_RF\_1.1**

This format allows a user to see the files of an object on disk or cloud. When archiving complex objects with small files, performances are better using AXF\_1.1 because the files are wrapped into an AXF container (this is the reason of the note). When this format is chosen for a cloud storage array, there are limitations on the server side to the size of file that can be created. This limitation is around 5TB per file. If a DIVA Core object contains a file larger than 5TB, it is recommended to use AXF\_1.1 instead of AXF\_RF\_1.1.

#### **Updated Support for AXF\_1.1**

When this format is selected for cloud storage, DIVA Core will create a new AXF segment every 500GB not to compromise multipart upload performances. Some object storage vendors limit the number of parts per object to 10000. This 500GB AXF segment limit is to keep a reasonable size for each part. This is the recommended format when archiving complex objects.

## **AWS Glacier Instant Retrieval Support**

Added glacier-instant-retrieval to the list of supported storage classes for AWS S3.



DIVA Core 8.1 includes the following new features and enhancements:

#### **System Management App Interface**

The new System Management App interface replaces the DIVA Core Configuration Utility.

## **SMB Support With Linux-based Actors**

Linux-based Core Actors support CIFS Servers for transfers and accessing a CIFS remote Vantage transcode cache folder starting with DIVA Core 8.0. A Linux Core Actor can now be used with Vantage transcoding. See the DIVA Core Installation and Configuration Guide for more detailed information.

## **Flashnet Migration Tool**

The Flashnet Migration Tool leverages a hidden REST API endpoint that reads from the Flashnet Database and writes to the Core Database. This initial tool release supports only Flashnet installs with SONY ODA media and objects archived by Avid or IPWS clients.

#### **Metadata Database (MDS)**

To effectively operate with large volumes of files and folders and other metadata, DIVA Core stores the metadata separately from the Oracle database in the Core Metadata Database.

Prior to DIVA Core 8.1, the Core Metadata Database consisted of a flat file, and stored information for Complex objects components only. The directory that contains these files is the Metadata Database Root Folder.

Starting with DIVA Core 8.1, the Core Metadata Database is now stored in MongoDB. The data files should be treated with the same caution as the Oracle database, and should be backed up at regular intervals using the DIVA Core Backup Service. See the Operations Guide for detailed information.

#### **Backup Service (BKS)**

Legacy DIVA Core uses Oracle Database Engine. The addition of MDS and underlying MongoDB required changes to support Database Data files backups for these 2 Database engines.

The DIVA Core Backup Service is now referred to as *BKS*. The Backup Service is comprised of two types of services, DIVA Core Backup Service and one or more DIVA Core DBAgent Services. See the DIVA Core Operations Guide for detailed information.

The Backup Service controls command execution, DIVA Core archives, synchronization and configuration.



The DBAgent Service performs database specific tasks (that is, backups and restores), monitors their progress, and reports disk usage. See the DIVA Core Operations Guide for detailed information.

#### **Avid AM (Archive Manager) Updater Tool**

The AM Updater is used to be able to migrate the AAF files into the AM (Archive Manager) Database. The AM Database is needed to be able to initiate restores from Avid using AMC. The AM Updater application is a migration/utility tool designed to import AAF metadata files into the Avid Interplay | Production Archive Engine database. The primary scope is to import the AAF files generated by Flashnet in a scenario without Archive Engine into the database of a new fresh installed Archive Engine.

#### **New Terminology**

DIVA Core 8.1 release introduces new terminology for various components as follows (this has been changed in release 8.2. See *New Terminology* in the *DIVA Core 8.3.1 includes the following new features and enhancements:* section).

- Actor is now named Datahub
- Proxy Actor is now named Proxyhub
- Production System is now named Network
- Source/Destination is now named Server



DIVA Core 8.0 includes the following new features and enhancements:

#### **Documentation Update**

Starting with DIVA Core 8.0 some documents have been merged into the Operations Guide and the Installation and Configuration Guide. This was done to achieve a smaller library, making it easier to find the information you are looking for. Previous standalone documents that have been merged and are no longer being published are as follows:

- Security Guide has been merged into the Installation and Configuration Guide
- Cluster Manager Installation and Configuration has been merged into the Installation and Configuration Guide
- Database User's Guide has been merged into the Installation and Configuration Guide
- Checksum Support User's Guide has been merged into the Installation and Configuration Guide
- DIVA Core Migrate Utility installation and configuration sections have been merged into the Installation and Configuration Guide. The Operations and Error Handling sections have been merged into the Operations Guide.
- Export/Import User's Guide has been merged into the Operations Guide

#### **Operating Systems**

DIVA Core 8.0 supports system installations in Windows 2012 R2, 2016, and 2019, and Oracle Linux 7 x86 64 or later (64-bit) environment.

Windows 2008 server is no longer supported. Windows Server 2008 R2 end-of-life mainstream supported ended on January 13, 2015. On January 14, 2020, Microsoft ended all support for Windows Server 2008 R2.

#### **Core Database Communications**

Secure communication with Oracle Database requires the following minimum versions:

- Windows: OracleDivaDB\_3-1-0\_12\_2\_0\_1\_0\_SE2\_Windows\_64-bit
- Linux: OracleDivaDB 3-1-0 12 2 0 1 0 SE2 OEL7 x86 64

#### Servers and Storage

The following new Servers are supported in DIVA Core 8.0:

#### **Google Cloud Storage Accounts**

DIVA Core 8.0 includes support for GCS (Google Cloud Storage). GCS is the object storage service offered by Google to Google Cloud account owners. Like any other object storage service, GCS offers an interface to create buckets and objects under buckets. For security reasons, do not directly use a Google account for the object



storage interface. DIVA Core needs to be associated with a service account and a specific role/permission.

#### **Azure Blob Storage Accounts**

DIVA Core 8.0 includes support for Azure Blob Storage. Azure Blob Storage is the object storage service offered by Microsoft to Azure account owners. Like any other object storage service, Azure Blog Storage offers an interface to create blobs (objects) under buckets. The configuration of AZCS (Azure Cloud Storage) is similar to the configuration of other cloud storage in DIVA Core.

#### Sony ODA Gen3

Sony ODA Gen 3 is now supported. The new drive type is ODS-D380F. The new drive supports the new ODC5500R cartridge, which has a 5.5 TB capacity. This is a WORM drive and is still R/W compatible with ODC3300R and read-only compatible with older cartridge types.

#### **IBM TS1160**

The IBM TS1160 drive is now supported.

Refer to the DIVA Core Installation and Configuration Guide for more details on these storage and Servers.

#### **Array Custom Bucket Names**

DIVA Core 8.0 supports Custom Bucket Names for arrays.

With an AXF Reference file, it may be useful to specify a custom bucket name by specifying it in the storage options. When you specify a custom bucket name, all instances will be written into the same bucket. If you specify a custom bucket name, the maximum number of instances per bucket is unlimited. If you allow DIVA Core to generate the bucket name, then DIVA Core will only put the configured maximum number of instances per bucket before creating a new bucket.

#### **Native File and Folder Support**

Users can see their files and folders in native format on archive devices rather than as an AXF container files. You can also access files and folders on storage devices like object storage. This access opens the archive to the use of third party software to perform operations on the archive (for example, metadata collection, face recognition, transcoding, and so on).

#### **Transcoders**

There are several updates to transcoder upgrading and configuration. See Chapter 13 in the DIVA Core Installation and Configuration Guide for detailed information on these procedures.



#### **Partial File Restore Job Options**

Partial File Restore now supports optional parameters when submitting jobs. The options are available on the Edit Partial Restore Setting dialog box and can be found in Chapter 9 of the Installation and Configuration Guide.

#### **SMB Support With Linux-based Actors**

Linux-based Actors now supports CIFS Servers for transfers and accessing a CIFS remote Vantage transcode cache folder. A Linux Core Actor can now be used with Vantage transcoding. See the DIVA Core Installation and Configuration Guide for more detailed information.



# Restricted Use of Included Oracle Software Components

The Oracle database included with the DIVA Core system is limited to use only for the operation of the DIVA Core software.

#### **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

# **Documentation Accessibility**

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

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

# **Access to Telestream Support**

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

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



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