



Telestream



Supported Environments

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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	<p>Web Site: https://www.telestream.net/telestream-support/diva/support.htm</p> <p>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.</p> <ul style="list-style-type: none"> • Support hours for customers are Monday - Friday, 7am - 6pm local time. • P1 issues for customers are 24/7.
Telestream, LLC	<p>Web Site: www.telestream.net</p> <p>Sales and Marketing Email: info@telestream.net</p> <p>Telestream, LLC 848 Gold Flat Road, Suite 1 Nevada City, CA USA 95959</p>
International Distributor Support	<p>Web Site: www.telestream.net</p> <p>See the Telestream Web site for your regional authorized Telestream distributor.</p>
Telestream Technical Writers	<p>Email: techwriter@telestream.net</p> <p>Share comments about this or other Telestream documents.</p>

Preface

This document outlines the technical environments supported by the DIVA Core Suite 8.2. Included are package compatibility, supported hardware, supported Managed Storage and drives, supported DIVA Core Partial File Restore formats, supported source and destination servers, and supported Avid Interplay releases and transcoders.

Audience

This document is intended for System Administrators and Telestream Installation and Delivery Team personnel.

Documentation Accessibility

For information about Telestream's commitment to accessibility, visit the Telestream Support Portal at <https://www.telestream.net/telestream-support/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>.

Document Updates

The following table identifies updates made to this document.

Date	Update
January 2022	<p>Updated copyright dates and book publishing date</p> <p>Update RAM configuration recommendation for Core Manager, Cluster Manager, and Core Actor and Core Manager.</p> <p>Removed references to Windows Server 2012 R2.</p> <p>Updated ACSLS releases and added note identifying latest qualified release.</p>

Date	Update
February 2022	Updated minimum cores required on all Xeon servers. Added section on supported APIs.
April 2022	Converted book to Telestream formatting and styles. Added information for Oracle 19c support. Updated book for release 8.2. Added information for Hitachi Content Platform. Added information for AWS Glacier Instant Retrieval. Updated terminology to new standards (see the Overview for updated terms)
May 2022	Added REST API to the supported API section Updated list of Supported Drives for IBM designations.
August 2022	Added support for Windows Server 2022 Reverted all references to Content App back to DIVA View Minor formatting updates.
September 2022	Updated terminology and new title page graphic.
March 2023	Added MatrixStore information to Supported Object Storage table. Updated copyright dates. Updated support and library links.

Overview

The DIVA Core Suite has numerous options available that are either licensed together, or separately.

DIVA Core Overview

The DIVA Core architecture allows the integration of many different types of servers and technologies, such as Broadcast Video Servers, Storage Area Networks, and Enterprise Tape Group Managed Storage. DIVA Core 8.2 can support interoperability among systems, helping to ensure long term accessibility to valued content, and keeping up with evolving storage technologies.

DIVA Core 8.2 supports system installations in Windows 2016, and 2019, and Oracle Linux 7 x86_64 or later (64-bit) environment. Oracle Linux enables selection of specific languages during system installation, but the main Linux installation must be in English. To use a language other than English (after installation), you must create a user configured for the language. All Windows installations must be in English only.

The installation of DIVA Core varies from site to site. The exact configuration of your specific DIVA Core platform is not covered in this guide. For details on your specific DIVA Core System installation and configuration, refer to your DIVA Core System Configuration and consult with the Telestream Installation and Delivery Team.

The System Configuration is a document prepared by Telestream (or an affiliated system integrator) after installation of DIVA Core at your site. It is a complete record of the configuration of the DIVA Core subsystems and third party interfaces, site details and contacts, user names and passwords, and remote access codes.

Note: Telestream recommends keeping the operating system up to date with the latest security patches.

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
- Object is now called Virtual Object
- 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 Command and Control Panel are now called System Management App
 - DIVA Analytics and DIVAProtect are now called Analytics App

DIVA Core Product Compatibility

The DIVA Core 8.2 Suite is compatible with other DIVA Core product lines including the following:

- [Oracle Database and DIVA Core Backup Service](#)
- [DIVA Connect](#)
- [DIVA Core Enterprise Connect](#)
- [Supported API Releases](#)

Oracle Database and DIVA Core Backup Service

The Core Oracle Database and Backup Service components are installed as an integral part of the standard DIVA Core system installation. The components are typically installed on the same server as DIVA Core.

The Oracle Database is backed up using the RMAN and RSYNC components that are distributed as part of the Oracle Database package.

Notes: 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

Scheduled backups using the DIVA Core Backup Service are configured in its configuration file. The DIVA Core Backup Service manages and monitors the entire backup process. DIVA Core 8.2 supports Oracle Database version 11.2.0.4 or greater.

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

DIVA Connect

DIVAnet has been renamed to DIVA Connect starting with release 2.3.1. DIVA Connect 2.3.0 is compatible with DIVA Core 7.3.1 and above. DIVA Connect 2.3.0 works with DIVA Core API versions 8.2 and below. DIVA Connect 2.3.0 ClientAdapter will not interoperate with DIVA Connect Core Adapter 2.2 and below. DIVA Connect 2.2 also runs on Windows based systems, but it is not backward compatible to releases before DIVA Core 7.3.1. You must use either DIVA Connect 2.0 or Legacy DIVA Connect when running DIVA Core releases earlier than DIVA Core 7.3.1.

If you are operating a DIVA Core release earlier than 7.3.1, refer to the DIVA Connect Installation, Configuration, and Operations Guide or the appropriate Legacy DIVA Connect documentation (for releases 6.5 and 7.2).

DIVA Core Enterprise Connect

This release of DIVA Core Enterprise Connect is compatible with DIVA Core 7.4 and later, DIVA Connect 2.1 and later, and DIVA View 5.4 and later. DIVA Connect 2.2 and later is required for the HTTP-based transport to the DIVA Connect CoreAdapter.

The current DIVA Core Enterprise Connect software release is 1.0. DIVA Core Enterprise Connect 1.0 supports the 2.2 release of the DIVA Core Web Services API; earlier API releases are not supported on release 1.0. This is true for both SOAP and REST.

Supported API Releases

The following legacy API releases and configurations are supported for each major DIVA Core release. That is, the first two version number changes, for example, 8.2, 8.3, 9.0, 9.1, and so on:

REST API

DIVA Core exposes its functionality through a REST interface. It is self-contained in DIVA Core 8.0 and all future DIVA Core releases. In the 8.0 release, the API is used exclusively by the DIVA Core Web Application.

Note: Telestream recommends using the REST API rather than the previous existing APIs (that is, DIVA Core Enterprise Connect, DIVAS, Java and C++). Although all previous APIs will remain available, the REST API offers new and enhance features.

See the REST API Programmer's Guide for detailed information.

Supported and Tested Legacy API Configurations

The following API configurations are supported in DIVA Core 8.0 and later:

- C++ API 7.5 to 5.5 on Windows
- C++ API 7.5 to 7.4 on Linux
- Java API 7.5 to 6.5 on Windows
- Java API 7.5 to 6.5 on Linux
- Enterprise Connect (latest release) on Windows with the following configurations:
 - http, rest, xml, connect directly to DIVA Core
 - http, rest, form_url_encoded, connect directly to DIVA Core
 - http, soap, xml, connect directly to DIVA Core
 - https, rest, xml, connect directly to DIVA Core
 - https, rest, form_url_encoded, connect directly to DIVA Core
 - https, soap, xml, connect directly to DIVA Core

Untested Configurations Used at Customer's Own Risk

The following API configurations are untested and can be used, but are used at the customer's own risk:

- C++ and Java Legacy API 7.6 and newer.
- DIVA Core Symphony; that is, DIVAS that uses WSO2 application server.
- Older Enterprise Connect (older than latest release). That is, if another EC is released, only the latest release will be tested.

- Enterprise Connect connected using the DIVA Core Adapter mode.
- Enterprise Connect on Linux.

Known Issues

The following are known issues when using APIs:

- The Java API does not support Partial Restore Instance; it will always use -1 as the Instance ID and DIVA Core will always pick the instance automatically.
- Older Java API releases do not return the same status codes as the C++ API. Calls that fail in the C++ API due to `DIVA_ERR_INVALID_PARAMETER` might fail in the Java API with a different error code; for example, `DIVA_ERR_INTERNAL`, and so on.
- `GetObjectsDetailsList` does not work correctly in the Java API 7.0 and prior releases. They are skipped during automated tests because they cause random timeout and hang issues which break the automation.

Hardware and Software

These are the minimum hardware and software requirements to install and operate the DIVA Core 8.2 software. Refer to [General Storage Requirements](#) for detailed disk configuration information.

Note: MongoDB, in its default configuration, can use up to half the available RAM minus 1GB on the server on which it is installed. You have to plan the location of MDS MongoDB installation accordingly.

Topics:

- [DIVA Core Architecture](#)
- [Intel, Microsoft Windows, and Oracle Linux](#)
- [General Storage Requirements](#)

DIVA Core Architecture

A DIVA Core system uses a combination of software modules which can run on a single computer, or can be distributed across different systems.

The main DIVA Core components are as follows:

Core Manager

The DIVA Core component of the archive also hosting the archive system database.

Core Manager Cluster

Based on the Microsoft Cluster configuration. Core Manager Cluster is only valid in a Windows based environment, not in Linux.

Core Actor

Responsible for all data transfers (Archive, Restore, Copy, Repack, and so on).

Core Actor and Core Manager (Single Computer)

Systems running both Core Actor and Core Manager functions on a single computer. You must try to avoid this configuration for performance reasons. This is only usable for entry level configurations.

Legacy DIVA Connect and DIVA Connect 2.0

Used in DIVA Connect configurations for unified access. Legacy DIVA Connect is part of the DIVA Core installation process. DIVA Connect 2.0 installation is a separate process and therefore not a drop in replacement for the legacy DIVA Connect.

DIVA Connect 2.1 and later

Used in DIVA Connect configurations for unified access. DIVA Connect 2.1 (and later) is not a drop in replacement for the legacy DIVA Connect. DIVA Connect 2.1 (and later) is specifically for compatibility with DIVA Core 7.5 and later Linux and Windows installations, and not backward compatible with earlier DIVA Core releases before 7.3.1.

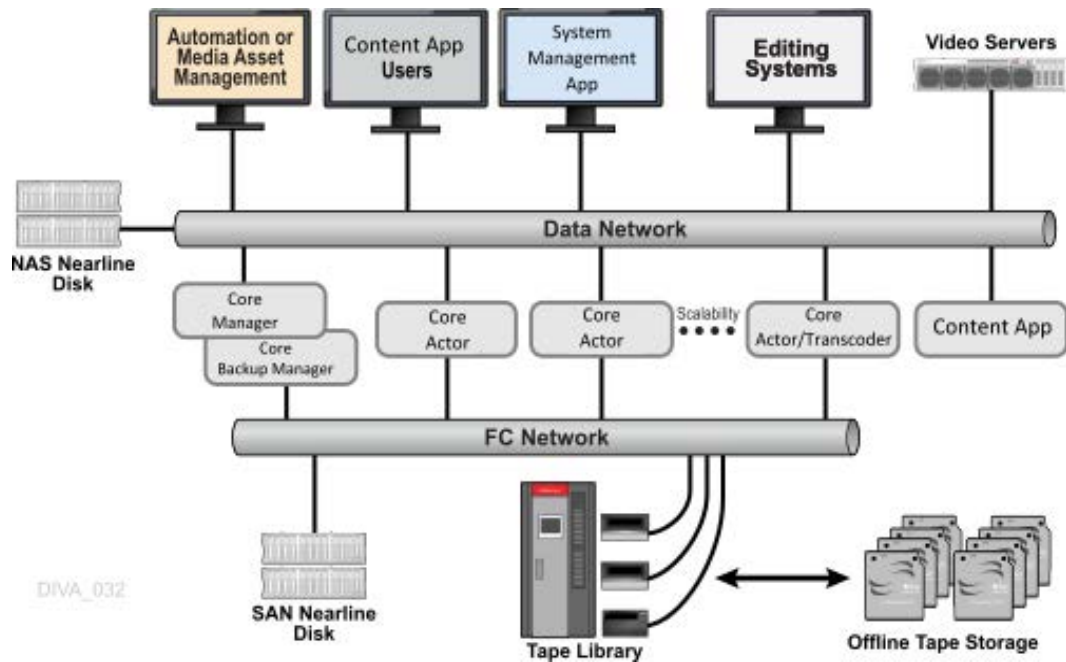
DIVA View

A web based application to search and browse the archive.

DIVA Core System Management App

Used for configuring, monitoring and managing the DIVA Core system.

The following figure represents a DIVA Core configuration with the main DIVA Core software components installed on different servers. DIVA Connect (used to access multiple DIVA Core systems) is not represented and is generally installed on a dedicated server.



System Component Interconnectivity

On the data path, a DIVA Core solution is connected on the storage side to the Tape Group library, or shared disks, or both. On the source and destination side, it is connected to the video servers, NLE, or file servers.

Storage Connection

SAN (Storage Area Networks), NAS (Network Attached Storage), or Direct Attached technologies can be used. Different types of interfaces are required on the servers to support the different types of storage devices as follows:

- Fiber Channel HBA (Host Based Adapter) for SAN
- SCSI Bus or HBA for Direct Attach
- 10 Gigabit Ethernet for NAS

Intel, Microsoft Windows, and Oracle Linux

Telestream can deliver x86 architecture servers matching or exceeding the recommendations provided in the following sections (except the Windows license to be purchased). Partners can also purchase servers from other vendors if the minimum requirements are met. Telestream does not qualify or recommend specific models from other vendors.

Note: The operating system installed on all computers must be installed in the English language. Telestream cannot support DIVA Core computers that have the operating system installed in other languages.

DIVA Core Operating System Compatibility

Use the following table to confirm that you have the proper operating system installed for each computer in the system when upgrading your DIVA Core installation to release 8.2.

Note: The minimum server operating system for using Complex Virtual Objects is Windows Server 2016.

Component	DIVA Core Release	Operating System Compatibility (for upgrades only)
DIVA Core	8.2 and later	Windows Server 2016 (64-bit) Windows Server 2019 (64-bit) Windows Server 2022 (64-bit) Oracle Linux 7 x86_64 and later (64-bit)
DIVA Core	8.0 and later	Windows Server 2016 (64-bit) Windows Server 2019 (64-bit) Oracle Linux 7 x86_64 and later (64-bit)
DIVA Core	7.6.x	Windows Server 2016 (64-bit) Windows Server 2019 (64-bit) Oracle Linux 7 x86_64 and later (64-bit)
DIVA Core	7.4 and later	Oracle Linux 7 x86_64 and later (64-bit)
DIVA Core	7.3	Windows Server 2016 (64-bit)
Core Actor	8.0 and later	Windows Server 2016 (64-bit) Windows Server 2019 (64-bit) Oracle Linux 7 x86_64 and later (64-bit) ¹²

Component	DIVA Core Release	Operating System Compatibility (for upgrades only)
Core Actor	7.7.x	Windows Server 2016 (64-bit) Windows Server 2019 (64-bit) Oracle Linux 7 x86_64 and later (64-bit) ¹²
Core Actor	7.6.x	Windows Server 2016 (64-bit) Windows Server 2019 (64-bit) Oracle Linux 7 x86_64 and later (64-bit) ¹
Core Actor	7.4 and later	Oracle Linux 7 x86_64 and later (64-bit) ¹
Core Actor	7.3	Windows Server 2016 (64-bit only)
DIVA Connect	2.3.1 and later	Windows Server 2016 (64-bit) Windows Server 2019 (64-bit)Oracle Linux 7 x86_64 and later (64-bit)
DIVA Connect	2.1, 2.2, and 2.3.0	Windows Server 2016 (64-bit) Oracle Linux 7 x86_64 and later (64-bit)
DIVA Connect	2.0	Windows Server 2016 (64-bit)
DIVA Connect	Legacy	Windows Server 2016 (64-bit)
DIVAmigrate	8.0 and later	Windows Server 2016 and later (64-bit) Oracle Linux 7 x86_64 and later (64-bit)

1. Linux-based Core Actors only support Vantage transcoding operations
2. Linux-based Core Actors can automatically mount to CIFS Servers

Core Manager

The following server platform is the minimum requirement recommended for the installation of the Core Manager software:

- Rack mount chassis
- One Xeon E5-2420 CPU (8 cores, 1.9 GHz)
- 32 GB RAM
 - Telestream recommends 64 GB RAM when using MongoDB (for Complex Virtual Objects) in addition to the Oracle Database.
- Two 300 GB HDD 10,000 RPM (configured in RAID 1) system disks

Note: If you use DIVA Core to archive Complex Virtual Objects like DPX, it is advisable to ask for a specific recommendation based on the estimated traffic (in terms of size and number of Virtual Objects to be archived per day). In general, if Complex Virtual Objects need to be archived, Telestream recommends using a minimum of two 900 GB HDD with 10,000 RPM. This recommendation is also valid for the Backup Manager or a Core Actor if a Core Actor server is used for the Backup Manager.

- Redundant power supply and fans
 - Two onboard GbE interfaces (copper RJ45 interfaces)
 - One Fiber Channel HBA (Host Bus Adapter) for Tape Group library control
-

Note: A Fiber Channel HBA is not required with SONY Petasite Managed Storage (controlled through the PCS software and a network API) or with Oracle StorageTek Managed Storage if the ACSLS software is used in the configuration.

- Windows Server 2016 (64-bit)
 - Windows Server 2019 (64-bit)
 - Oracle Linux 7 x86_64 and later (64-bit)
-

Note: If ACSLS virtual Managed Storage are used, an HBA will be required. Consult with Telestream for more information.

Core Manager Cluster

The following server platform (two identical servers) is the minimum requirement recommended for the installation of the Core Manager software in a cluster environment. Core Manager Cluster is only valid in a Windows based environment, not in Linux.

- Rack mount chassis
 - One Xeon E5-2420 CPU (8 cores, 1.9 GHz)
 - 32 GB RAM
 - Telestream recommends 64 GB RAM when using MongoDB (for Complex Virtual Objects) in addition to the Oracle Database.
 - Two 300 GB HDD 10,000 RPM (configured in RAID 1) system disks
-

Note: If you use DIVA Core to archive Complex Virtual Objects like DPX, it is advisable to ask for a specific recommendation based on the estimated traffic (in terms of size and number of Virtual Objects to be archived per day). In general, if Complex Virtual Objects need to be archived, Telestream recommends using a minimum of two 900 GB HDD with 10,000 RPM. This recommendation is also

valid for the Backup Manager or a Core Actor if a Core Actor server is used for the Backup Manager.

- Redundant power supply and fans
 - Two onboard GbE interfaces (copper RJ45 interfaces)
 - One SAS or FC HBA (for the shared disk bay connection)
-

Note: A shared disk bay with dual RAID controller (SAS or FC Interface) and seven 300 GB SAS disks connected to both servers to accommodate the Oracle database.

- One Fiber Channel HBA for Tape Group library control
-

Note: A Fiber Channel HBA is not required with SONY Petasite Managed Storage (controlled through the PCS software and a network API) or with Oracle StorageTek Managed Storage if the ACSLS software is used in the configuration.

- Windows Server 2016 (64-bit)
- Windows Server 2019 (64-bit)

Core Actor

The following is the minimum server configuration recommended for the installation of the Core Actor software:

- Rack mount chassis
 - One Xeon E5-2420 CPU (8 cores, 1.9 GHz)
 - 16 GB RAM
 - Two 300 GB HDD 10,000 RPM (configured in RAID1) system disks
 - RAID5 disk space for cache, at least four 1TB disks
 - Optional RAID5 disk space for Nearline storage (DIVAgrid Architecture)
-

Note: The DIVAgrid Architecture consists of aggregating direct attached disks from multiple Core Actors into one single DIVA Core array. The Core Manager distributes content it needs to store on this array across the different Core Actors composing the array. This provides a cost effective, high performance solution for Nearline disk storage and is ideal in workflows requiring temporary disk storage to enable the creation of multiple Virtual Object instances and transcoding.

- Redundant power supply and fans
- Two onboard GbE interfaces (copper RJ45 interfaces)
- One 10 GbE interface (optional)

- One Fiber Channel HBA for the connection to an external shared disk (optional)
- One Fiber Channel HBA for the connection to the Tape Group drives
- Oracle Linux 7 x86_64 and later
- Windows Server 2016 (64-bit)
- Windows Server 2019 (64-bit)

Core Actor and Core Manager (Single Computer)

The following is the minimum server configuration recommended for the installation of the Core Actor and Core Manager software on a single computer. This configuration should be limited to entry level systems for performance reasons:

- Rack mount chassis
- One Xeon E5-2420 CPU (8 cores, 1.9 GHz)
- 32 GB RAM
 - Telestream recommends 64 GB RAM when using MongoDB (for Complex Virtual Objects) in addition to the Oracle Database.
- Two 300 GB HDD 10,000 RPM (configured in RAID1) system disks

Note: If you use Core to archive Complex Virtual Objects like DPX, it is advisable to ask for a specific recommendation based on the estimated traffic (in terms of size and number of Virtual Objects to be archived per day). In general, if Complex Virtual Objects need to be archived, Telestream recommends using a minimum of two 900 GB HDD with 10,000 RPM. This recommendation is also valid for the Backup Manager or a Core Actor if an Actor server is used for the Backup Manager.

- RAID5 disk space for cache - at least four 1 TB disks
- Optional RAID5 disk space for Nearline storage (DIVAgrid Architecture)

Note: The DIVAgrid Architecture consists of aggregating direct-attached disks from multiple Core Actors into one single Core Array. The Core Manager distributes content it needs to store on this array across the different Actors composing the array. This provides a cost effective, high performance solution for Nearline disk storage and is ideal in workflows requiring temporary disk storage to enable the creation of multiple Virtual Object instances and transcoding.

- Redundant power supply and fans
- Two GbE interfaces
- One 10 GbE interface (optional)
- One Fiber Channel HBA for the connection to an external shared disk (optional)
- One Fiber Channel HBA for the connection to the Tape Group drives

Note: An additional port maybe required for the Tape Group library control.

- Windows Server 2016 (64-bit)
- Windows Server 2019 (64-bit)
- Oracle Linux 7 x86_64 and later (64-bit)

DIVA Connect 2.x

The DIVA Connect configuration provides a consolidated view of a distributed DIVA Core system. The following is the minimum server configuration recommended for the installation of DIVA Connect 2.x:

- Rack mount chassis
- One Xeon E5-2420 CPU (8 cores, 1.9 GHz)
- 16 GB RAM
- Two 300 GB HDD 10,000 (configured in RAID1) system disks
- One 10 GbE interfaces (optional)
- Oracle Linux 7 x86_64 and later
- Windows Server 2016 (64-bit)

Windows Server 2019 (64-bit) DIVA View

DIVA View is Telestream's archive content management application providing you a friendly web based window into assets stored in the DIVA Core system. DIVA View can play proxy releases of the archived clips, and can store the proxy files on local disks, SAN, or NAS disk storage. The following is the minimum server configuration recommended for the installation of DIVA View:

- Rack mount chassis
- Two Xeon E5-2440 CPUs (8 cores, 2.4 GHz, 15 MB cache)
- 16 GB RAM
- Two 300 GB HDD (configured in RAID1) system disks
- Redundant power supply and fans
- RAID5 disk space proxy storage five 3 TB (if stored locally)
- Two onboard GbE interfaces
- One 10 GbE interface (optional)
- Fiber Channel HBA for the connection to an external shared disk for proxy storage (optional)
- Windows Server 2016 (64-bit)
- Windows Server 2019 (64-bit)
- Windows Server 2022 (64-bit)

Note: The minimum AWS VM for DIVA View is m5a.xlarge.

General Storage Requirements

The following table describes the main storage characteristics of the various components:

Server	CPU	System Disks	Cache and Disk	Data Disks
Core Manager Cluster ¹	1	RAID1	No	No
Core Manager	1	RAID1	No	No
Core Actor	1	RAID1	RAID5	Nearline (optional)
Core Actor and Core Manager	1	RAID1	RAID5	Nearline (optional)
Core Actor and Transcoder	2	RAID1	RAID5	Transcoding area plus optional Nearline disk.
DIVA Connect	1	RAID1	No	No
DIVA View ²	2	RAID1	No	RAID5 if no proxy external storage is attached.

1. Core Manager Cluster is only valid in a Windows based environment, not in Linux.
2. The minimum AWS VM for DIVA View is m5a.xlarge.

Core Manager

The Core Manager server specification requirements for CPU, memory, disk, and network depend on the size of the system and the number of requests you plan on processing with the Core Manager. The following server specifications are the minimum recommended requirements for installation of the Core Manager software:

Processor

Single quad-core processor. A 64-bit computer must be used for running Windows Server 2016 and Oracle Linux 7 update 2.

RAM

Minimum of 32 GB. Telestream recommends 64 GB RAM when using MongoDB (for Complex Virtual Objects) in addition to the Oracle Database.

Ethernet

Two Gigabit Ethernet connections.

Fiber

This is optional. However, if the Tape Group library is SCSI controlled then Dual Fiber Channel is recommended.

Disk

The following are the minimum partition sizes for the Core Manager computer. These minimum sizes are also valid for Core Manager Backup configuration or a Core Actor used as a Backup Manager.

Caution: All partitions must be protected by RAID.

Windows Partition	Linux Partition	Minimum Size	Recommended Block Size	Comments
C:\DIVA	/home/diva	10 GB	Operating System Default	DIVA Core Software
C:\app	/u01	Windows: 10 GB Linux: 10 GB	Operating System Default	Core Oracle Database Binaries
D:\	Not applicable	100 GB	Operating System Default	DIVA Core Software (for Cluster only).
E:\	/u02	30 GB	8 kb	Core Oracle Database Data Files
F:\	/u03	Windows: 5 GB (exactly) Linux: 5 GB	4 kb	Core Oracle Database Archive Logs
H:\	/u04	100 GB	64 kb	Core Oracle Database Backup Folder
G:\	/u05	150 GB	Operating System Default	Core Complex Virtual Object Metadata Database (optional).

Core Actor

The Core Actor server specification requirements for CPU, memory, disk, and network depend on the size of the system and the total throughput required. You can add additional Core Actor servers to acquire additional throughput. The following server specifications are the minimum recommended for installation of the Core Actor software:

Processor

Single quad-core processor. A 64-bit computer must be used for running Windows Server 2016 and Oracle Linux 7 update 2.

RAM

Minimum of 16 GB.

Ethernet

Two Gigabit Ethernet connections. Ten GbE is recommended.

Fiber

Dual Fiber Channel is recommended for Tape Group drive control.

Disk

The following are the minimum partition sizes for the Core Actor computer:

Caution: All partitions must be protected by RAID.

Windows Partition	Linux Partition	Minimum Size	Recommended Block Size	Comments
C:\DIVA	/home/diva	10 GB	Operating System Default	DIVA Core Software
H:/	/u04	100 GB	64 kb	Core Oracle Database Backup Copy (optional)

Managed Storage, Drives, and Disks

DIVA Core 8.2 supports various drives and Managed Storage.

- [Supported Managed Storage and Control Software](#)
- [Supported Drives](#)
- [Supported Disks](#)

Supported Managed Storage and Control Software

The following table identifies Managed Storage and associated control software supported by DIVA Core 8.2. LibAttach is only valid in a Windows based environment, not in Linux.

Note: The latest qualified release of ACSLS is 8.5.1.

Manufacturer	Library	Control Software	Core Robot Manager Module
Dell	TL4000/TL2000 ¹	Direct SCSI/FC	Robot_SCSI
	ML6010 ²	Direct SCSI/FC	Robot_SCSI
HP	StoreEver	Direct SCSI/FC	Robot_SCSI
	ESL G3-700	Direct SCSI/FC	Robot_SCSI
	ESL G3-1500	Direct SCSI/FC	Robot_SCSI
	ESL G3-3000	Direct SCSI/FC	Robot_SCSI
	ESL G3-5000	Direct SCSI/FC	Robot_SCSI
	MSL-2024	Direct SCSI/FC	Robot_SCSI
	MSL-2048	Direct SCSI/FC	Robot_SCSI
MSL-6480	Direct SCSI/FC	Robot_SCSI	
IBM	TS3100	Direct SCSI/FC	Robot_SCSI
	TS3200	Direct SCSI/FC	Robot_SCSI
	TS3310	Direct SCSI/FC	Robot_SCSI
	TS3500	Direct SCSI/FC	Robot_SCSI
	TS4500	Direct SCSI/FC	Robot_SCSI

Manufacturer	Library	Control Software	Core Robot Manager Module
Oracle StorageTek	SL8500 ³	LibAttach 1.4.2 ⁵	Robot_ACSLS
	SL500 ⁴	Direct SCSI/FC	Robot_SCSI
	SL150	Direct SCSI/FC	Robot_SCSI
	9310	ACSLS	Robot_ACSLS
	5500	ACSLS	Robot_ACSLS
	L180	ACSLS or Direct SCSI/FC	Robot_ACSLS or Robot_SCSI
	L7000	ACSLS	Robot_ACSLS
	SL24	LibAttach 1.4.2 ⁵	Robot_ACSLS
	L80	Direct SCSI/FC	Robot_ACSLS
	L40	Direct SCSI/FC	Robot_ACSLS
	L20	Direct SCSI/FC	Robot_ACSLS
	L1400M	Direct SCSI/FC	Robot_ACSLS
Oracle StorageTek	SL4000	LibAttach 1.4.25 Direct SCSI/FC	Robot_ACSLS Robot_SCSI
Oracle StorageTek	SL3000	LibAttach 1.4.25 Direct SCSI/FC	Robot_ACSLS Robot_SCSI
Qualstar	TLS-5000	Direct SCSI/FC	Robot_SCSI
	RLS-85210	Direct SCSI/FC	Robot_SCSI
Quantum (ADIC)	Scalar i6000	Direct SCSI/FC	Robot_SCSI
	Scalar i500	Direct SCSI/FC	Robot_SCSI
	Scalar i40/i80	Direct SCSI/FC	Robot_SCSI
	Scalar i3/i6	Direct SCSI/FC	Robot_SCSI
	Scalar 100	Scalar DLC or Direct SCSI/FC	Robot_ADIC or Robot_SCSI
	Scalar 1000	Scalar DLC or Direct SCSI/FC	Robot_ADIC or Robot_SCSI
	Scalar 10000	Scalar DLC or Direct SCSI/FC	Robot_ADIC or Robot_SCSI
	Scalar 12000	Scalar DLC or Direct SCSI/FC	Robot_ADIC or Robot_SCSI
	Scalar i2000 ⁶	Scalar DLC or Direct SCSI/FC	Robot_ADIC or Robot_SCSI

Manufacturer	Library	Control Software	Core Robot Manager Module
Sony Petasite	S60	PSC 5.00	Robot_Sony
Sony ODA	ODS-L10	Core Robot Manager	Robot_SCSI
	ODS-L30M	Core Robot Manager	Robot_SCSI
	ODS-L60E	Core Robot Manager	Robot_SCSI
	ODS-L100E	Core Robot Manager	Robot_SCSI
Spectralogic	T-Finity	Direct SCSI/FC	Robot_SCSI
	T950	Direct SCSI/FC	Robot_SCSI
	T680, T380, T200	Direct SCSI/FC	Robot_SCSI
	T120	Direct SCSI/FC	Robot_SCSI
	T50e	Direct SCSI/FC	Robot_SCSI

1. The Dell TL2000 is an IBM TS3100 library.
2. The Dell ML6010 is an AIDC i500 library.
3. Operational upon robot failure when configured with multiple LSMs and one robot per LSM.
4. The SL500 library will be transitioned to End of Life (EOL) soon.
5. DIVA Core only supports 32-bit LibAttach and not 64-bit.
6. Autoclean is not supported, but the Scalar i2000 with partitioning is supported.

Supported Drives

The following drives are supported by DIVA Core 8.2.

Manufacturer	Drive Model
HP	LTO-3 LTO-4 LTO-5 LTO-6 LTO-7 LTO-8
IBM	LTO-1 LTO-2 LTO-3 LTO-4 LTO-5 LTO-6 LTO-7 ¹ LTO-8 LTO-9 ² 3592 TS1120 Jaguar TS1140 Jaguar TS1150 Jaguar TS1155 Jaguar TS1160 Jaguar
Oracle StorageTek	Titanium 10000-A Titanium 10000-B Titanium 10000-C Titanium 10000-D 9840A 9840B 9840C 9840D 9940A 9940B

Manufacturer	Drive Model
Sony (Optical)	ODS-D55U ODS-D77F The following drives are supported in DIVA Core 7.4 and later: ODS-280F ODS-280U ³ ODS-D380F

1. Drivers for the IBM LTO-7 and LTO-8 drives only exist for Windows Server 2012.
2. When a virgin LTO-9 tape is mounted into a drive for the first time, it will require an initialization that may take between 30 minutes and 2 hours. In DIVA Core, the consequence is the positioning step will take between 30 minutes and 2 hours.
3. The ODS-280U has not been qualified for use with DIVA Core 7.5 and later releases.

Sony ODA Optical Drives

Sony ODA Blu-ray Optical Drives are supported in DIVA Core 8.2 on Windows only. The drives are viewable as a Tape Group Drive and Cartridge (having UDF format) under the **Disk Drives** tab in the System Management App.

The drives must be configured using the Optical Disk Archive Utility before configuring DIVA Core on the system.

The Windows Device Manager will display the drives as an Unknown Device because there are no drivers available for them. Several configuration files must be modified to include these drives in the DIVA Core System. See the DIVA Core Installation and Configuration Guide for detailed information.

The details of these drives are as follows:

- DIVA Core has only been tested with the ODS-280F Fiber Channel type. These drives are twice as fast as the Gen1 drives. The ODS-280U has not been qualified for use with DIVA Core 7.5 and later releases.
- The cartridge available for the ODC3300R WORM drive has a 3.3 TB capacity.
- Gen2 drives can read content written on Gen1 media with Gen1 drives. DIVA Core does not support the READ-ONLY media drive compatibility. Telestream recommends isolating Gen1 media from Gen2 media in the configuration (no cross-generation compatibility), and there must be at least one Gen1 drive in a library containing Gen1 cartridges.

- Sony ODA Gen 3 is supported. The new drive type is ODS-D380F and uses the following new cartridge:
 - **Cartridge Type**
ODC5500R
 - **Capacity**
5.5 TB
 - **Drive Type**
WORM

Note: The new drive is still R/W compatible with ODC3300R and read-only compatible with older cartridge types.

Supported Disks

DIVA Core 8.2 supports the following disks:

- Direct Connection using a local path

For example drive letters in Windows such as M:\managed_disk, and on Linux such as /managed_disk.

- CIFS Connection
- NFS Connection (on Linux)
- FTP Connection
- Seachange BML
- Harmonic MediaGrid
- Tiger MetaSan
- Quantum StoreNext Filesystem
 - IBM GPFS (General Purpose Filesystem)
- Huawei OceanStore 9000

Cache Disk

This disk is only used for caching, Tape Group to Tape Group copying, Tape Group spanning, and Tape Group repacking operations. The cache does not have to be on a RAID protected disk, but it is recommended.

The size of this disk must be at least the size of your largest Virtual Object. The cache disk can be a local disk, SAN, NFS, or SMB connected. Telestream recommends setting the cache disk block size to at least 64KB.

Storage or Storage and Nearline

The disk will be used for storing DIVA Core Virtual Objects and also Nearline operations. The storage size depends on the amount of space desired to store Virtual Objects. This disk must be RAID protected.

You can also use a storage disk for cache. The storage disk can be a local disk, SAN, NFS, or SMB connected. Telestream recommends setting the storage disk block size to at least 64KB.

Virtual Object Storage

DIVA Core 8.2 supports a variety of Virtual Object storage solutions.

Supported Virtual Object Storage

The following table identifies Virtual Object storage accounts supported by DIVA Core 8.2.

Virtual Object Storage Type	Protocol	Supported Storage Classes	Managed Storage	AXF Reference-File	Server	Disk Instance Recovery
Alibaba OSS	S3	Standard, IA (Infrequent Access), Archive, ColdArchive	Yes	Yes	Yes	Yes
AWS S3	S3	Standard, Intelligent-Tiering, Standard-IA, One Zone-IA, Glacier, Glacier-Deep-Archive, Glacier-Instant-Retrieval	Yes	Yes	Yes	Yes
Azure Blob Storage	Blob REST API	Standard, Hot, Cool, Archive	Yes	Yes	Yes	Not Yet Supported
Ceph	S3	Standard	Yes	Currently Not Tested	Yes	Yes
Cloudian	S3	Standard, Archive	Yes	Yes	Yes	Yes

Virtual Object Storage Type	Protocol	Supported Storage Classes	Managed Storage	AXF Reference-File	Server	Disk Instance Recovery
EMC ECS	Swift / S3	Standard	Yes	Yes	Yes	Yes
Google Cloud Storage	JSON API	Standard, Nearline, Coldline, Archive	Yes	Yes	Yes	Not Yet Supported
HCP (Hitachi Content Platform)	S3	Standard	Yes	Yes	Yes	Currently Not Tested
Isilon OneFS 8.2 (and later)	S3	Standard	Yes	Yes	Yes	Yes
NetApp StorageGRID	S3	Standard	Yes	Currently Not Tested	Yes	Yes
ObjectMatrix MaxiStore	S3	Standard	Yes	Yes	Yes	Not currently tested.
Oracle Cloud Storage	OCI	Standard, Archive	Yes	Not Supported Yet	Yes	Yes
Scality	S3	Standard	Yes	Not Supported Yet	Yes	Yes
Tata Cloud Storage	S3	Standard	Yes	Yes	Yes	Yes

Ceph Implementation Notes

The current Ceph implementation cannot create a bucket in Ceph storage yet due to the Ceph current implementation of the S3 protocol, so the bucket must exist before it can be written to. For use as disk (versus use as a Server) the user must provide the bucket to use through the `-bucket_name` option in the Storage Option of the corresponding array definition.

There must be 2 buckets created prior using Ceph as a Storage Array, one for storing data and one for metadata. For example, `mybucket` and `mybucket-metadata`. You must create those two buckets and specify `-bucket_name=mybucket` in the Array configuration in Storage Options as shown in the following figure:

HCP (Hitachi Content Platform) Notes

For the multipart upload to work with HCP, you must set `-disable_etag_verification` to the storage options of an S3 array:

Also, in the HCP Management Console, the option Optimized for Cloud Protocols only must be set. This option can be found under Namespace > Settings > Optimization.

Partial File Restore

Numerous Virtual Object formats have been tested successfully with the DIVA Core Partial File Restore operation. Testing with samples provided by the customer is recommended to confirm interoperability. Telestream makes no commitment if variations in the encoding profiles cause issues with the DIVA Core Partial File Restore feature. All formats support AUTO_DETECT.

Contact Telestream Support for more details about each implementation.

Note: All formats are supported on Windows. However, Linux currently only supports GXF, QuickTime, MPEG2 Transport Stream, BWAV, and MXF.

- [GXF \(General Exchange Format\)](#)
- [MXF \(Material Exchange Format\)](#)
- [AVI \(Audio Video Interleaved\)](#)
- [AVI with Separate WAV Files](#)
- [AVI with FFV1 or FFVH](#)
- [QuickTime/MP4](#)
- [LXF \(Leitch Exchange Format\)](#)
- [DIF with Separate WAV Files, and DV with Separate Audio, or Self-contained DV Types](#)
- [BWAV \(Broadcast WAV\)](#)

GXF (General Exchange Format)

GXF Partial File Restore is supported on Windows in the following formats:

- Aurora Edit
 - MPEG2 D10 MPEG2 I-frame
 - MPEG2 D10 MPEG2 LGOP
- BitScream
 - DV25
- DIVA Core TMCommunicator
 - DV25
 - DV50
 - MPEG2 D10
- K2 Media System
 - MPEG2 D10 MPEG2 I-frame
 - MPEG2 D10 MPEG2 LGOP
- K2 Media System / Summit
 - AVC-I
 - DVCPRO
 - XDCAM HD
- Mseries
 - MPEG2 D10 MPEG2 I-frame
 - MPEG2 LGOP
- NewsEdit
 - DV25
 - DV50
 - MPEG2 D10 MPEG2 I-frame
- PDR
 - MJPEG
- Profile XP
 - DV25
 - DV50
 - MPEG2 D10 MPEG2 I-frame

MXF (Material Exchange Format)

MXF standard specification (SMPTE377M) defines multiple operational patterns. Only OP1a is supported. MXF Partial File Restore is supported on Windows and Linux in the following video essence formats:

- DV25, DV50, DV100
- DVCPRO (SD and HD)
- DNxHD
- MPEG2 D10¹
- MPEG2 LGOP (SD and HD)
- SONY XDCAM HD
- H.264/MPEG-4 AVC
- AVC-Intra (subset of H.264)
- SONY XACV (subset of H264, HD and 4K)
- DNxHR (new codec from AVID for high definition)

Note: Although these video formats are supported, qualifications are still required because there might be many variations of MXF wrapper for a given video essence format.

For Linux, BMX has replaced the MOG SDK library. BMX will always be used.

For Windows, BMX is the default library. You can fall back to MOG SDK only for temporary compatibility by going to the System Management App under Advanced Actor Settings and changing the Use BMX Library parameter to N.

AVI (Audio Video Interleaved)

The applicable wrapper format is a single AVI file per Virtual Object, and may contain audio tracks. This Partial File Restore is supported by AUTO_DETECT only.

Adobe Premiere

Supports DVSD and PCM video and audio essences.

Harris Corporation Nexio 3600

Supports DVSD and PCM video and audio essences.

1. MXF generated by Seachange are supported as standalone MXF files (*no .pd or .vix file*).

AVI with Separate WAV Files

The applicable file format is a single AVI file with separate WAV files. The AVI file contains a single video track, and the WAV files contain a PCM sample format. This Partial File Restore is supported by VIDEO_FORMAT_AVI and AUTO_DETECT in Windows only; not in Linux.

Manufacturer	Product	Release	Supported Video and Audio Essence
Insipiens	AVI Writer	1.0.0.0	MPEG2 LGOP
Matrox	MQSink Filter Format 4	2.0.0.271	DV25, DV50
	MQSink Filter Format 6	2.0.0.271	Dv25, DV50, DVSD
	MQSink Filter for MPEG Format 4	2.0.0.270, 2.0.0.271	MPEG2 LGOP, MPEG2 I-Frame ¹
	DSX AVI File Format 6	1.0.0.362, 1.0.0.401	MPEG2 LGOP ² , M701 HD
Telestream	Flip Factory ³	Unknown 6.0, 6.1	DVSD, MPEG2 LGOP M701 HD

1. MPEG2 I-Frame supported on 2.0.0.271 only.
2. MPEG2 LGOP supported on 1.0.0.362 only.
3. DIVA Core 7.5 ended Telestream support for Telestream Flip Factory. Telestream will provide best efforts to assist customers to transition to other transcoding solutions.

AVI with FFV1 or FVVH

AVI clips containing FFV1 or FVVH video essence are now supported. Use these formats for video preservation purposes. These codecs are lossless and generate intra-coded frame only (no GOP).

QuickTime/MP4

QuickTime is a file wrapper and may contain multiple tracks of various types (audio, video, and so on). QuickTime self-contained clips are supported using OMNEON and AUTO_DETECT.

QuickTime Partial File Restore is supported by Windows Core Actors only.

Partial File Restore support for QuickTime with MPEG2 LGOP (XDCAM HD 422 with sixteen tracks of audio) is supported as follows, regardless of the type of video or audio content:

- The number of tracks per clip is currently limited to thirty.
- Tracks must have the same duration and start time.

- QuickTime standards support advanced edit list features that are not supported by Partial File Restore.
- Each track must be composed of a single valid edit list entry that may or may not start from zero.

Some content types are not supported, including some video and audio combinations. The following table identifies supported types:

Supported Track Types	Cardinality
Video	One video track per clip
Video	Two video tracks per clip ¹
Audio	Zero or multiple tracks per clip
Closed Caption ²	One track per clip
Timecode with a single entry	One track per clip
Timecode with multiple entries	One track per clip

1. When a QuickTime clip contains two video tracks, the tracks must be synchronized and have the same duration and start from 00:00:00:00.
2. Empty Closed Caption tracks are supported.

QuickTime Self-Contained Clips

The format of the video essence is not a criterion in QuickTime Self-Contained clips. In theory, the Partial File Restore for QuickTime should be able to support any type of video essence. Partial File Restore is not recommended for the following variations in the video essence format:

- Where the video quality supports 420 or 422
- Where the number of pixels is not a factor
- Where the clip is bit rate independent

The following table describes what has already been tested and does not guarantee that Partial File Restore will support it. The only supported audio formats are AIFF and WAV (LPCM).

Manufacturer	Product	Release	Supported Video Essence
Dalet			DVCPRO100

Manufacturer	Product	Release	Supported Video Essence
Omneon	Spectrum	5.x	DV25, DVCPRO, DVCPRO50, DVCPRO HD, MPEG2 D10, MPEG2 I-Frame, MPEG2 LGOP, MPEG2 LGOP HD
Oracle	SAMMAsolo	Unknown	DV25
Telestream	Flip Factory ¹		MPEG2 LGOP

1. DIVA Core 7.5 ended Telestream support for Telestream Flip Factory. Telestream will provide best efforts to assist customers to transition to other transcoding solutions.

MP4 Clips

MP4 wrapper is also known as MPEG-4 Part 14. This format has been developed based on QuickTime specifications. All the formats currently supported by the QuickTime partial restore are also supported with MP4.

LXF (Leitch Exchange Format)

LXF (Leitch Exchange Format) is well defined, and Partial File Restore supports specific releases of the file format regardless of the source of the clip (Nexio, Flip Factory, and so on). The supported request format is either `AUTO_DETECT` or `VIDEO_FORMAT_LEITCH`.

The LXF Release 0 supported video and audio essences are:

- MPEG2 I-frame Standard Definition (SD)
- MPEG2 LGOP SD
- DV
- DVCPRO
- DVCPRO50

The LXF Release 1 supported video and audio essences are:

- MPEG2 4:2:2 (1080i and SD only)
- DV SD
- DVCPRO SD
- DVCPRO50 SD
- DVCPRO HD

DIF with Separate WAV Files, and DV with Separate Audio, or Self-contained DV Types

The applicable file format is a single DIF or DV file with separate WAV files, and DV with separate audio or self-contained DV types. WAV files contain the PCM sample format.

This Partial File Restore supports Avid Liquid and Omneon Spectrum with DV25 and WAV PCM using either AUTO_DETECT or VIDEO_FORMAT_OMNEON.

BWAV (Broadcast WAV)

BWAV (Broadcast WAV) is a regular WAV file that includes additional information - Bext and iXML (optional). Bext is a broadcast extension containing metadata, including TimeReference (timecode reference in milliseconds). DIVA Core uses Bext as a timecode reference for Partial File Restore.

BWAV may also contain an optional metadata called iXML. The metadata iXML contains an additional TimeReference and a frame rate. When iXML and Bext are both present, DIVA Core uses iXML because it contains an accurate frame rate (useful to convert milliseconds to and from a timecode). Without iXML, the millisecond to timecode conversion is only an approximation.

Unmanaged Storage Repositories

DIVA Core transfers content to and from external equipment such as broadcast video servers, video editing systems, and generic computer systems. The following are the certified interfaces and protocols supported by DIVA Core 8.2.

Note: The Vstream protocol is no longer supported for Seachange source and destination servers. This applies to the source types SEACHANGE_BMC and SEACHANGE_BML when no -ftp option is specified (indicating Vstream protocol is in use, not FTP).

- [Unmanaged Storage Repositories](#)
- [Cloud and Virtual Object Storage Servers](#)

Unmanaged Storage Repositories

The following table identifies the source and destination servers supported by DIVA Core 8.2.

Manufacturer	Server Model	Protocol	Unicode Support	OTU Support
Avid Airspace	See FTP_STANDARD table.	FTP	See the DIVA Core Avid Connectivity User's Guide.	No
Avid Interplay	ISIS or NEXIS	AVID_DHM AVID_DET AVID_AMC AVID_DIRECT	Yes, currently for AMC only.	No
DataExpedition	Expedat 1.15, Expedat 1.16	MTP	Yes	No
Disk (Local)	Internal disk	Direct	Yes	No
Disk (Network)	Shared File System, SAN, NAS	CIFS	Yes	No
EVS	Little Big Server, XT3	FTP	No	No
Grass Valley	NewsEdit, NewsFTP (Aurora Edit HD), UIM Gateway with MXF ¹ , K2 ²	FTP	Only K2 is supported.	No
Leitch	VR Series ³ , Nexio 3600	FTP	Only Nexio 3600 is supported.	Only Nexio 3600 is supported
Omneon	Spectrum 4.6 SR2 Spectrum 4.7 SR2 Spectrum 5.0 SR1	FTP and AVI player FTP and AVI Player FTP and AVI Player	Only Spectrum 5.0 SR1 is supported.	Yes Yes Yes
Omneon	Spectrum 6.1 with System Manager 5.14	FTP Only	Yes	Yes

Manufacturer	Server Model	Protocol	Unicode Support	OTU Support
Omneon	MediaGrid ⁴ 1.1	Mapped drive using MediaGrid file system drivers	Yes	No
Quantel	SQserver regional server with ISA gateway ⁵	FTP	No	No
Sony	News Base Hyper Agent	FTP	No	No
Various (UNIX, Windows, Mac)	Any standard FTP server (RFC-959)	FTP	No	No
	Secure FTP server V3 (limited support)	SFTP	No	No

1. UIM Gateway with MXF is supported for release 2.0.6.3.
2. GXF and MXF formats are supported.
3. Supported only using WanStreamer or ArchiveStreamer.
4. Linux does not support MediaGrid because the API it depends on is not Linux compatible.
5. MXF supports release 2.1-22.09. Release 2.1-22.10 supports intelligent archive in TAR format.

The following table identifies FTP servers supporting FTP_STANDARD.

Note: Telestream only supports Linux-based FTP servers for DIVA Core systems installed in the Linux operating system environment.

Manufacturer	Product Name	Core Actor Qualified	Unicode Support	WFM Qualified	OTU Qualified
Microsoft	IIS	Yes ¹	No	Yes ²	Yes
FileZilla	FileZilla FTP Server	Yes	Yes	No	Yes
Gene6	Gene6 FTP Servers	Yes	Yes	No	No

1. Core Actor supports IIS with UNIX-like listing type configured.
2. WFM supports IIS with DOS-like listing type configured.

Cloud and Virtual Object Storage Servers

The following table identifies the Cloud and Virtual Object Storage Servers supported by DIVA Core 8.2.

Product Name	Protocol	Supported Storage Tier
OCI Virtual Object Storage	OCI	Standard Archive
AWS Storage	S3	Standard Intelligent-Tiering Standard-IA One Zone-IA† Glacier Glacier Deep Archive
Dell Elastic Cloud Storage		Standard
Scality Zenko		Standard
Cloudian		Standard
NetApp StorageGrid		Standard
Alibaba OSS		Standard Archive
Google Cloud Storage	GCS JSON API	Standard Nearline Coldline Archive
Azure Blob Storage	Blob REST API	Standard Hot Cool Archive

Transcoders

DIVA Core supports the use of Telestream Vantage for performing transcoding operations. The following table lists the DIVA Core version and the qualified versions of Vantage:

DIVA Core Version	Telestream Vantage Version
7.1	4.1
7.2	6.2
7.3	6.3
7.4	6.3
7.5	7.1
7.6	7.1
7.7	8.1
8.0	8.1
8.1	8.1
8.2	8.1

Avid Connectivity

DIVA Core supports Avid Connectivity and MediaCentral | Asset Management DIVA Core Connector version 4.6.0. For more detailed information see the DIVA Core Avid Connectivity User's Guide.

- [Avid Interplay Compatibility](#)
- [MediaCentral Compatibility](#)

Avid Interplay Compatibility

The following table identifies current Avid Interplay and DIVA Core release compatibility for AMC and TMC.

Note: Use AMCommunicatorI22 for all releases. Use 1.0 for Legacy workflows and 2.0 for Avid Direct workflows.

Interplay Release	TMCommunicator	TMCommunicator Binaries	AMCommunicator
2.2.x	Yes	TMCommunicatorI22	Yes
2.3.x	Yes	TMCommunicatorI22	Yes
2.4.x	Yes	TMCommunicatorI22	Yes
2.5.x	Yes	TMCommunicatorI25	Yes
2.6.x	Yes	TMCommunicatorI26	Yes
2.7.x	Yes	TMCommunicatorI26	Yes
3.0.x	Yes	TMCommunicatorI30	Yes
3.1.x	Not Supported	Not Supported	Yes
3.2.x	Only DHM	TMCommunicatorI32 - TMClient 3.1 is required, DET restore is not supported.	Yes
3.3.x	Only DHM	TMCommunicatorI33 - DET restore is not supported.	Yes
3.4.x	Only DHM	TMCommunicatorI33 - DET restore is not supported.	Yes
3.5.x	Only DHM	TMCommunicatorI33 - DET1 is not supported.	Yes
3.6.x	Not Supported	Not Supported	Yes
3.7.x	Not Supported	Not Supported	Yes
3.8.x	Only DET	TMCommunicatorI37	Yes
2017.2	Only DET	TMCommunicatorI37	Yes

Interplay Release	TMCommunicator	TMCommunicator Binaries	AMCommunicator
2018.6	Not Supported	Not Supported	Yes
2019.6	Not Supported	Not Supported	Yes
2020.4	Not Supported	Not Supported	Yes

Avid Interplay is compatible with the following DIVA Core releases:

- AvidForCore release 1.x is compatible with DIVA Core releases 6.5.3 and later (this has not been fully tested in later releases).
- AvidForCore release 2.x (for direct ISIS) is compatible with DIVA Core releases 7.2.1 and later.

MediaCentral Compatibility

The MediaCentral | Asset Management DIVA Core Connector version 4.6.0 is now tested and qualified with DIVA Core 8.x. This means DIVA Core and this DIVA Core Connector release can be updated if it is not release 4.6.0, and then all the releases of MediaCentral listed can be supported. This new connector release can be used in the following MediaCentral | Asset Management systems:

MC AM Release Date	AM Build Number
2019.6	7.2
2019.9	7.3
2020.4	7.4
2020.9	7.5
2021.3	7.6