

## **DIVA Core**

Object Transfer Utility (OTU) User's Guide

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# Preface

This document describes functionality and operations for this release of the DIVA Core OTU (*Object Transfer Utility*).

## Audience

This document is intended for Installation, Administration and Operations personnel to follow all of the necessary steps to provide full functionality of the DIVA Core Object Transfer Utility component.

## Documentation Accessibility

For information about Telestream's commitment to accessibility, visit the Telestream Support Portal located at <https://portal.goecodigital.com>.

### Access to Telestream Support

Telestream customers that have purchased support have access to electronic support through the Telestream Support Portal located at <https://portal.goecodigital.com>.

## Related Documents

For more information, see the DIVA Core documentation set for this release located at <https://portal.goecodigital.com>.

## Document Updates

The following table identifies updates made to this document.

Date	Update
June 2020	Minor formatting updates.
February 2021	Rebranded document to Telestream Updated copyright notices

## Conventions

The following text conventions are used in this document:

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<b>Convention</b>	<b>Meaning</b>
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.
<a href="#">blue text</a>	Blue text indicates a link to an outside source, or to another chapter, section, or glossary term in this book.

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# Introduction

This chapter describes an overview of the DIVA Core OTU (*Object Transfer Utility*) and includes the following information:

- [Object Transfer Utility Overview](#)
- [Object Transfer Utility for Cloud Sources and Destinations](#)

## Object Transfer Utility Overview

The DIVA Core OTU (*Object Transfer Utility*) is an alternate method of initiating Archive (*FTP to DIVA Core*) and Restore (*DIVA Core to FTP*) requests using the Control GUI. OTU provides a simple, visual means of selecting files or objects to archive or restore. This utility is only available when logged into the Control GUI as an Administrator.

OTU primarily consists of two panels:

- One exhibits a tree representation of the folders, files, and objects in the your defined Source/Destination locations.
- One exhibits a similar tree representation of objects sorted by *Category Names* and *Object Names* currently in the archive.

OTU filters enable creation of various views with selected subsets of objects. You are able to select one or more files, or objects, or both, and drag-and-drop them from one window to the other to initiate an Archive or Restore operation. This function does not actually transfer files or objects, but provides an easy, graphical way to select files and objects for transfer, and automatically fills in the Archive or Restore request dialog box.

The DIVA Core Object Transfer Utility supports the following Source/Destinations:

- Oracle Object Storage Accounts
- Amazon S3 Storage Accounts
- FTP\_Standard
- Leitch
- MSS
- Omneon
- PDR

## Object Transfer Utility for Cloud Sources and Destinations

After a Cloud Destination is defined, you can use OTU to browse through the container directory tree for objects in an Oracle Object Storage Account or an Amazon S3 Storage

Account. OTU loads the immediate children of the container folder (*or bucket*), and additional files and folders are added to the tree dynamically.

You can also use OTU to restore content to a container and folder of an object in an Oracle Object Storage Account or Amazon S3 Storage Account destination, or archive an object from an Oracle Object Storage Account or an Amazon S3 Storage Account source to DIVA Core.

The Object Transfer Utility can also identify a manifest file and remove all file fragments included in the manifest file so that a single file is displayed.

This chapter describes Object Transfer Utility operations and includes the following information:

- [Accessing OTU](#)
- [Object Transfer Utility Cloud Operations](#)
- [Archive Operations](#)
  - [Archiving Files](#)
  - [Filtering Configuration](#)
- [Restore Operations](#)

## Accessing OTU

The Object Transfer Utility is only available as an option when you are logged in to the DIVA Core Control GUI with *Administrator* privileges. If you are logged in as an Administrator, you will see the **OTU** icon on the ribbon bar, and the **OTU** menu item under the **Tools** menu in the far left panel of the Control GUI. Clicking one of these items displays the *OTU* screen.

The *OTU* screen consists of two panels side by side. Below them is a summary view of the *Current Requests Status* panel that is also displayed when the DIVA Core Manager is selected.

The left *OTU* panel displays the client's folder and file structure, or object list. This panel is the *Source Destination* panel.

The right *OTU* panel is a folder based view of the contents of the archive. This panel is the *DIVA Objects* panel.

## Object Transfer Utility Cloud Operations

After a Cloud Destination is defined, you can use OTU to browse through the container directory tree for objects in an Oracle Object Storage Account or Amazon S3 Storage Account. OTU loads the immediate children of the container folder, and additional files and folders are added to the tree dynamically.

Use the following procedure to modify the batch size for loading files and folders included in a container:

1. Open the Control GUI and navigate to **Tools**, and then **Preferences**.
2. Change the value of the **Number of FilesAndFolders** field in the *Files And Folders for Object* area at the bottom of the dialog box.
3. Click **OK** to save your changes.

You can use OTU to restore content to a container and folder of an object in an Oracle Object Storage Account or a bucket in an Amazon S3 Storage Account destination, or archive an object from an Oracle Object Storage Account or a bucket in an Amazon S3 Storage Account source to DIVA Core.

The Object Transfer Utility can identify a manifest file and remove all file fragments included in the manifest file so that a single file is displayed.

## Archive Operations

To initiate archiving of files, you first select the **Source Destination View** tab on the *Source Destination* panel. Immediately below the tabs there are several controls as follows:

- **Source Selection** list
- **Disconnect** button
- **Connect** button

Use the following procedure to connect to a Source to initiate an Archive operation:

1. Use the **Source Selection** list to select one of the predefined Source locations. Click the down arrow and select the desired source from the list. The selected **Source Name** will be displayed in the box.

Source selections can only be changed if the current view is closed. If the **Source Selection** box is disabled (*grayed out*), the current view is connected and you cannot change the location in the **Source Selection** list. To enable changing the **Source Selection** again, you must first click **Disconnect** and then proceed as stated.

2. Hovering over the selected **Source Name** in the list (*after selecting it from the list*) will yield a dialog box showing the selected Source server information including the Server Name, Server IP, Type of server, and any Options used to connect to the server (*-login, and so on*).
3. Open the selected Source by clicking **Connect** to the right of the **Source Selection** list. The Source location's folder hierarchy is displayed, and you can expand each folder by clicking the icon to the left of the folder, or by double-clicking on the folder itself.

You can update the view to refresh the list of files in the source location using the Refresh button at any time while the view is open.

The Source/Destination is now connected and you can continue operations as outlined in the following subsections.

## Archiving Files

To archive files, highlight the file or files you want to archive. The highlighting works the same as in typical Windows folders. You can only select multiple files if they are in the same folder.

To display a view of categories and objects in the archive, there are several filters available on the top of the *DIVA Objects* panel as follows:

### **Category Filter**

You can use this filter to limit the display. To see all categories use the global asterisk wildcard.

You can specify a single category by name, and then use a truncated name to view a subset. An example of a truncated name would be *My\**, which would only include categories that begin with *My*. Because you used the asterisk wildcard, the ending of the **Category Name** does not matter in this case. The wildcard indicates that anything after *My* will match the filter if the **Category Name** starts with *My*.

You can only use wildcards as a trailing asterisk for truncation.

### **Object Filter**

This filter works the same as the **Category Filter**, and enables designation of all objects, or a subset of **Object Names**.

### **Date and Time Filter**

You use this filter to specify a date and time range with both beginning and ending dates being specified as a year, month, and day, (YYYY MM DD) and the time specified as an hour and minute (HH MM).

You select the **enable** check box to turn this filter on and off. Select the **enable** check box to turn on the **Date and Time** filter, and deselect the check box to turn the filter off.

After making any changes to any of the filter fields, click **Refresh** to refresh the *DIVA Objects* panel view.

Use the following procedure to start the archiving process:

1. Drag-and-drop the selected file (or files) from the *Source Destination* panel on the left to the desired folder (representing a *DIVA Core* category) in the *DIVA Objects* panel on the right.

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**Note:** If you select a directory in the *Source Destination* panel and you drag-and-drop the directory, the system assumes that you want to move all files in that directory. A global wildcard is inserted into the **Files** list in the *Send Archive Request* dialog box.

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This action causes the standard *Send Archive Request* dialog box to be displayed with the **Source**, **Files path root**, and **Category** fields filled in, and the name of the selected file, or list of files, entered in the **Files** area. Other fields will either be blank or set to their defaults.

The only additional field you *must* fill in is the **Media** field. You can modify all other default fields and fill in blank fields, but it is not necessary for archiving of the selected files.

2. Click **Send** to initiate the actual file transfer and archiving. You can cancel the Archive request at any time before clicking **Send** by clicking **Cancel**.

You can also reset the form to a blank form by clicking **Reset**, and then filling in the fields manually.

3. After you click **Send**, the results are displayed in the *OTU Request Summary* panel at the bottom of the *OTU* screen.
4. To exit the *OTU* screen and return to other *DIVA Core* functionality, click any other tab or icon. You can also close the Control GUI now if you are finished.

## Filtering Configuration

Archiving an object involves selecting a single object that will automatically include all of the associated source files. Use the following procedure to filter your views:

1. After selecting and opening the source location from the *Source Destination* panel, click the **Clips view** tab at the top of the display window.
2. After switching to the **Clips view** tab, select the desired video server using the **Filter As** list.

3. Navigate through the source folder tree until the names of the objects are listed in the display box panel. Each level is navigated by clicking on the **In** list down arrow. All immediate child folders will be displayed in the list for you to select from. Repeat the procedure to traverse another level down.  
  
Click **Up** to return to a higher folder level, and click **Refresh** to refresh the display.  
  
Object names are displayed without any file extensions. Each object includes all of the files that are components of that object when you archive it. Objects are arranged differently based on the type of video server selected.
4. Clicking the **Filtering/Configuration** tab enables filtering the view of the clips on the video server and configuration of the **Maximum Files to Display**.  
  
The **Reset** button will reset the forms to the defaults and not produce any filtering or display configuration.
5. After you have identified your filtering and you configure the maximum number of files to display, click **Save** to save the filter and view the filtered list of clips.
6. After you have selected one or more objects, you can dragged-and-dropped them to an archive folder in the *DIVA Objects* panel.  
  
From this point the process continues the same as when archiving files directly using the Control GUI.
7. To exit the OTU screen and return to other DIVA Core functionality, click any other tab or icon. You can also close the Control GUI now if you are finished.

## Restore Operations

You initiate restoring an object by dragging the object from the *DIVA Objects* panel on the right to the desired destination folder in the *Source Destination* panel on the left.

You cannot visually select individual archived files for restoration, because OTU only displays objects in the *DIVA Objects* panel. You perform a Restore operation by starting the same way as when archiving.

Use the following procedure to perform a restore operation:

1. Select the **Source Destination View** on the *Source Destination* panel.
2. Select a Destination location from the list on the left. This time the selection will be used as the Destination rather than the Source.
3. Click **Connect** to display the folder structure for this destination.
4. Expand the folder structure (*click the + icon to the left of the folder*) until the folder intended for the restored object is visible.
5. Use the filters on the top of the panel (*the same as when archiving*) to filter your view, and then click **Update** to refresh the *DIVA Object* panel.
6. Select the object to restore using the same process as when archiving files.  
  
Unlike archiving files, where just dragging-and-dropping from the panel with no files selected produces a global archiving request, restoring requires at least one object to be selected.
7. Drag the object from the *DIVA Objects* panel to a folder in the *Source Destination* panel and release the mouse button.
8. The standard *Send Restore Request* dialog box appears with the **Object Name**, **Category**, and **Destination** filled in. All other fields will be either blank or set to defaults.

9. Click **Send** to restore the object, or modify one or more fields before clicking **Send**. The **Reset** button clears all of the fields and enables you to enter requests manually. Click **Cancel** to cancel a restore before files are actually transferred.
10. To exit the OTU screen and return to other DIVA Core functionality, click any other tab or icon. You can also close the Control GUI now if you are finished.



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## Special Installation and Configuration

This chapter describes OTU installation and configuration for special situations and includes the following information:

- [OTU Installation](#)
  - [Acquiring the FTP Proxy Server](#)
- [OTU Configuration](#)
  - [Configuring and Starting the FTP Proxy Server](#)
  - [Configuring the OTU Video Server Source](#)

### OTU Installation

Installation and configuration of OTU is only applicable in one case - when the DIVA Core Manager does not have access to the Source/Destination, but the DIVA Core Actor does have access. In this instance, the FTP Proxy must be installed on the Actor computer.

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**Note:** OTU only supports FTP, and not SFTP.

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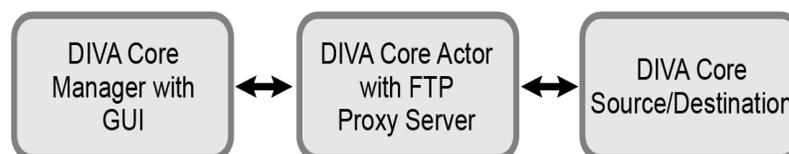
In this instance, there are additional installation and configuration steps required beyond the standard DIVA Core process to obtain the Object Transfer Utility functionality. The following subsections cover the processes required.

### Acquiring the FTP Proxy Server

Telestream does not provide the required FTP Proxy as described in the previous section. You can obtain the supported FTP Proxy from <http://handcraftedsoftware.org>.

### OTU Configuration

DIVA Core uses an FTP Proxy server to enable a connection from the DIVA Core Manager computer to the Source/Destination through a DIVA Core Actor computer.



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## Configuring and Starting the FTP Proxy Server

Configuration of the FTP Proxy Server is required before using it. If there is another FTP server running on the server, stop the FTP server. Use the following procedure to configure and start the FreeProxy server:

1. Open the *FreeProxy Control Center* from the Windows menu.
2. In the main window of the FreeProxy Control Center, click the **Ports Tools** icon. The *FreeProxy/FreeWeb* dialog box appears.
3. Enter the name for the server in the **Name** field. For example, FTPProxySvr.
4. Select **FTP Proxy** from the **Protocol** list.
5. Enter 21 for the value of the **Client Port** field.
6. Under the **Local Binding** field, select the Ethernet controller for your system. After selecting the controller, the software should automatically get the IP address of your system and display it in the box on the right.
7. Enter the desired values for **Read Timeout** field, and the **Connect Timeout** field in seconds.
8. Under **FTP Proxy Options** select **Allow incoming port connect**, **Any IP address**, and in the **Proxy option** field enter USER: Remoteld@Remotehost.
9. Click the **Done** button.
10. On the main tool bar, click **Start/Stop**.
11. Click **Start FreeProxy in Console Mode**.

After configuring and starting the FTP Proxy server, use the following commands to test the configuration and operation:

```
>ftp 172.16.3.21
```

The IP address of the computer where the FTP Proxy server is running.

```
>User: anonymous@172.16.3.100
```

The User ID and Host IP address of the FTP server to log in to.

```
>Pass: anonymous
```

The password for the FTP server.

This test should log in to the 172.16.3.21 FTP server. If these commands fail to log in to the FTP server, there is something set incorrectly in the configuration.

## Configuring the OTU Video Server Source

This section describes the configuration of DIVA Core to work with the OTU enhancements. Configuration parameters are modified through the DIVA Core Configuration Utility. Use the following procedure to configure DIVA Core:

1. Start the DIVA Core Configuration Utility and connect to the DIVA Core database.
2. In the *Source and Destinations* panel, click + to add the source. The *Add new row in Sources and Destinations* dialog box will appear.  
  
Enter the Source name in the **Source Name** field.  
  
Enter the IP address of the video server in the **IP Address** field.  
  
Select the Source Type from the **Source Type** list: **OMNEON** for Omneon server, **PDR** for GVG server, **LEITCH**, and so on
3. Select the production system from the **Production System** list.

4. Enter the following connection options in the **Connect Options** field:

- -login {userID}
- -pass {password}
- -port 21
- -OTUlogin {userID}
- -OTUpass {password}
- -OTUport 21
- -OTUIP {IP address}

The DIVA Core Actor uses the login, pass, and port parameters to communicate with the video server. These are the video server FTP userid, password, and port.

You can use a different log in, password, and port to access the list of clips, rather than the log in used by the Actor to transfer the clips. For example, with *Grass Valley Profile Standalone Server*, the triton user can list clips while the movie user is only able to transfer clips in GXF format.

OTU uses the OTUlogin, OTUpass, OTUport, and OTUIP parameters to display the files and clips in the left panel of the OTU screen.

**OTUlogin**

This parameter is the FTP user for the Back Up, Mirror Video Server, or Video Server.

**OTUpass**

This parameter is the FTP user password for the Back Up, Mirror Video Server, or Video Server.

**OTUport**

This parameter is the FTP port number for the Back Up, Mirror Video Server, or Video Server.

**OTUIP**

This parameter is the IP address of the Back Up, Mirror Video Server, or FTP Proxy Server.

For PDR servers, the Actor uses the login, pass, and port are the FTP parameters for the movie user, and OTUlogin, OTUpass, OTUport, and OTUIP are the parameters of the FTP server for the normal user.

For example:

- -login movie
- -pass movie
- -port 21
- -OTUlogin anonymous
- -OTUpass anonymous
- -OTUport 21
- -OTUIP 172.16.3.100

For other video server types, the Actor uses the login, pass, and port parameters for the FTP server. OTU can use the OTUlogin, OTUpass, OTUport, and OTUIP parameters to talk to the video server through the FTP Proxy.

5. Set the other parameters as follows:

- **Max Throughput (Mb/s)** = 1000
  - **Max Accesses** = 10
  - **Max Read Accesses** = 10
  - **Max Write Accesses** = 10
6. Click **OK** and the Source/Destination is added to the *Source/Destination* list.
  7. Notify the Manager.
  8. Stop, and then Start the DIVA Core Manager.

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## Frequently Asked Questions

This chapter addresses frequently asked questions.

### **Does the Object Transfer Utility perform more than Archive and Restore?**

No, the Object Transfer Utility is simply a graphical interface to make Archive and Restore requests easier to identify and submit.

### **Why can I not see the OTU item in the far left panel when I open the Control GUI?**

To access the OTU tree you must be logged in as an Administrator.

### **What is the Administrator Login and Password?**

Contact your System Administrator or Telestream Support for this information.