



Miria User Documentation for Unix

Miria 2022

Publication Number: Miria-USRUNIX-PDF-EN-0622-REV1

Publication Date: June 2022





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CHAPTER 1 - Presenting Miria User Interface

This chapter provides different user login procedures and helps you to discover the features of the Miria User Interface.

Miria User Interface Features

These are the Miria User Interface features available for all operating systems.

- **Easy-to-use.** A simple interface fully integrated to the desktop makes it easy for you to archive or copy data and retrieve it manually.
 - A Miria agent is required to archive and retrieve data locally on a Unix machine.
- Classification & Indexing. You can archive data in personal archives or in shared project archives and Miria assigns the appropriate metadata information.
- Advanced Search Across the Archives. Advanced search capabilities within a specific archive or across all the archives make data retrieval easy.
- **High Performance.** Miria handles the data flow to archive or retrieve continuously or in a deferred manner after optimization of requests, which ensures the highest performance.

Connecting to Miria User Interface

This topic describes how to connect to Miria User Interface.

Setting Up Connection Parameters

Once the Miria User Interface is installed, you must define both the archiving server and the database to which you will connect. You must also specify the connection mode.

For information on how to install and deploy Miria User Interface, see the Miria Installation Documentation.

To set up the connection parameters for the first connection

Miria User Interface starts and the connection window opens (Figure 1).

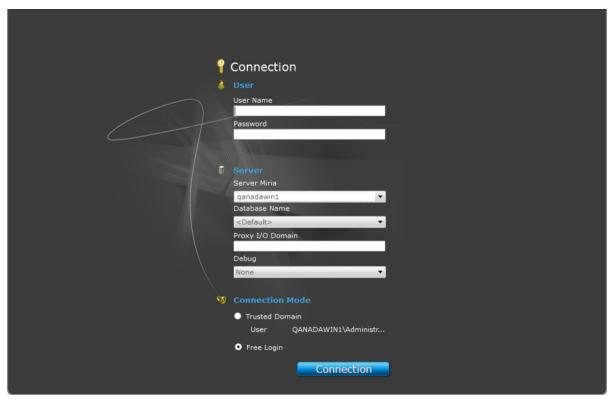


Figure 1: Connection page to access the user interface

1. Double-click the **User Interface shortcut**.

Note: You chose the location of the link during the Miria User Interface installation. The default location is /usr/Atempo/ADA/Run_AdaJavaUI.

2. Enter the appropriate login parameters.

Parameter	Options and Actions
User Name	Name of the user as defined in Miria.
Password	Password associated with the specified User Name.

Change Settings option.

Click Change Settings to display these connection advanced settings:

Miria Server	Name of the Miria server to which you will connect. You can use either the machine name, the network name, or the IP address.
Database Name	Choose the database instance that you want to use for Miria. The default value is ADA.

Parameter	Options and Actions
Proxy I/O	Name of a logical domain that is associated with a Proxy I/O definition.
Domain	Miria uses the domain that you specify at the log in to compute the Proxy I/O mapping when performing an archiving, retrieval, or copy operation.
	At the log in, you can:
	 Leave the Proxy I/O Domain field empty. To compute the Proxy I/O mapping, Miria uses all the proxy I/O definitions.
	Or
	 Enter the Proxy I/O domain provided by your administrator (e.g., Atempo). To compute the Proxy I/O mapping, Miria uses the proxy I/O
	definitions in which the <i>Domain</i> = argument matches 'Atempo' or '*'.
Debug	Leave this field set to None.
Connection Mode	Choose the connection mode per your administrator's recommendations:
	 Trusted Domain (or Single Sign-on). You automatically log in without typing a user name and a password other than the ones required to log on to your computer.
	 Free Login. You must enter your user name and password to log in to Miria.

3. Click Connection.

The server and database settings are set.

The connection parameters are saved and it is not required for you to enter them again the next time you log in to Miria User Interface, unless you want to connect to a different server or database.

Logging In to Miria User Interface Graphically

Once the connection parameters have been set up, they are saved and you do not have to enter them again the next time you connect to the same server or database.

To launch the Miria User Interface Graphically

1. Double-click the Run AdaJavaUI link.

Note: You chose the location of the link during the installation of Miria User Interface. The default location is /usr/Atempo/ADA.

The **Connection** window opens.

If you are in Trusted Domain mode, the login window is skipped and you do not need to enter your user name and password.

2. Otherwise, enter your User Name and Password, and click **Connection**. The Home window opens (Figure 2).

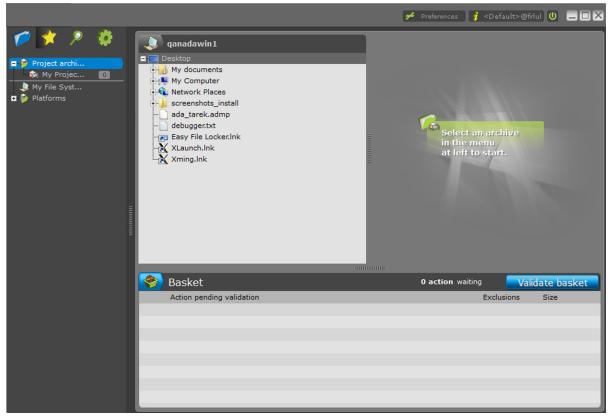


Figure 2: The left pane shows the list of all the archives that you are allowed to access

- 3. To open an archive, do the following:
 - Click My Project Archive to open your personal archive.

Or

Browse to the Project archive of your choice.

The selected archive is displayed in the Explorer in the right pane.

Logging In as a Different User

Once you have launched Miria User Interface, you can log off and then log in as a different user without shutting down and restarting Miria User Interface.

- 1. From the title bar, click ut at the right of the title bar. You are taken back to the **Connection** window.
- 2. Enter a different User Name and Password.
- 3. Click Connection.

You are then logged in as the new user.

Miria User Interface Overview

The Figure 3 illustrates the Miria User Interface:

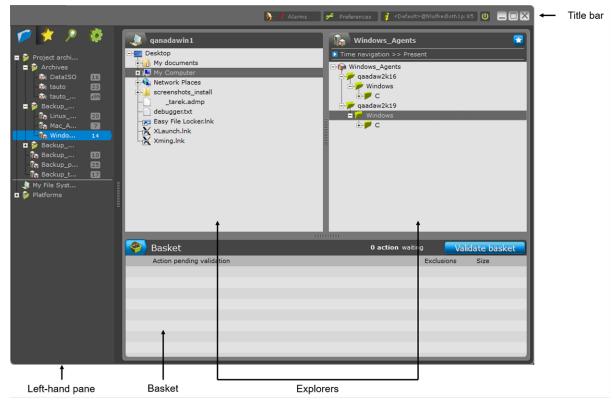


Figure 3: User interface areas

The Miria User Interface is composed of these areas:

- Title Bar
- Left-hand Pane
- Explorers
- The Basket

Title Bar

The Title Bar displays these buttons:

- Alarms Indicates the number of current alarms and access to the Messages window.
- Preferences Provides access to the Preferences window.
- **Information** Enables accessing the Information window, and indicates the name of the server and database to which you are connected.

For example, *ADA@ada_centoOS6xm:85* means that you are connected to Database ADA on server ada_cento0S6xm through Port 85.

Log off Closes the Miria User Interface.

Left-hand Pane

The Figure 3 illustrates the Miria User Interface left-hand pane:

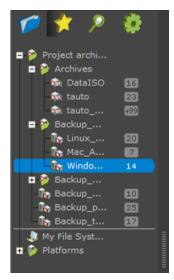


Figure 4: Navigation pane

The Left Pane contains these tabs:

- Browse. The Browse tab contains these elements:
 - Archives. List of all the archives you are allowed to access. Archives are sorted in a file tree under their organizations.
 - Click an archive to display its content in the right-hand Explorer.
 - Platforms. List of all the archiving platforms or platform pools that you are allowed to access.

Click a platform to display its file system in the Resource Explorer.

Click the *My File System* option to display the local machine file system.

Right-click a platform and select Open in right-hand Explorer to display the file system in the right-hand Explorer.

When selecting a platform pool composed of Windows and Unix/macOS platforms, two menus display:

- Open Archiving Platform (Windows).
- Open Archiving Platform (Unix).

Choose the type of platform you want to browse.

• Favorites. Gives you direct access to the archives that you have set as Favorites.

Click the tab with the star to display the Favorites tab.

To create favorite archives.

- a. From the left pane, select the archive that you want to set as a favorite.
- b. Click the star icon at the top right corner of the right-hand Explorer.

The favorite archive now displays in the Favorites tab of the left pane (star icon).

To open a favorite archive.

a. From the left pane, click the Favorites tab.

The list of favorite archives displays.

b. Click the archive that you want to open.

The selected archive opens in the right-hand Explorer.

 Search. Enables to search for archived objects among all archives the connected user is allowed to access.

Click the tab with the magnifying glass to display the Search pane.

See Searching for Archived Data for details.

- **Services**. The Services tab contains these elements:
 - Media List. Opens the list of media that enables you to perform actions on media and to view the volume that the archived objects occupy.

The Media List option is only displayed if archiving to the Media Manager storage manager, and if your administrator has enabled the *View Media List* advanced setting for your user.

Otherwise, the Media List option is grayed out.

See Managing Media for details.

 Volume Report. Displays volume information about each archive, as well as the global volume occupied by the data you are allowed to access.

See Viewing Volume Report for details.

Explorers

The Miria User Interface contains the Resource explorer and the Right-hand explorer.

Resource Explorer

Displays the file system, of either:

• The local workstation (using the *My File System* menu)

Or

• The archiving platform selected on the left-hand pane (using the right-click menu, option Open in the resource Explorer).

The Figure 3 illustrates the Miria User Interface resource Explorer:

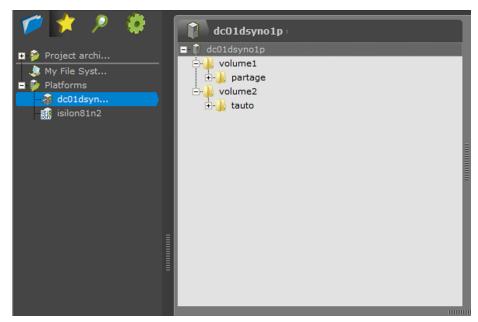


Figure 5: User interface Explorer

Context Menu

You can right-click an object to open a context menu (Figure 6). The context menu options vary in accordance with the selected object (file, directory, or folder), and with the permissions you have on that object.

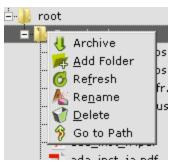


Figure 6: Context menu

These are the possible context menu options:

Archive.

When the Time Navigation feature is being used, the Archive option is grayed out. No archiving in the past is authorised.

- · Add Folder.
- · Refresh.
- Rename.
- Delete.:
 - The Delete option is not available for your local file system.
 - For a remote file system, you must validate the deletion action on the Basket.

Go to path.

Enables you to browse a network place or manually add it if this network place does not exist.

Right-hand Explorer

The right-hand Explorer may display:

• The archiving platform file system selected on the left-hand pane (using the right-click menu, option Open in the right-hand Explorer).

Or

• The Archive Tree for the archive that you have selected on the left-hand pane and the Time Navigation pane (Figure 7).

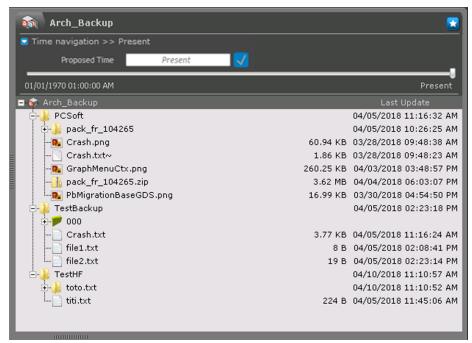


Figure 7: Example of an Archive Tree

Time Navigation Pane

To open the Time Navigation pane, click the arrow located to the left.

The Time Navigation pane enables you to propose a date and time in the past, in either of these ways:

Using the Time Navigation slider.

You must validate the selection by clicking the green check mark.

Or

Entering a date and time manually.

You must validate your entering by clicking the green check mark.

Or

Using a calendar.

The date and time apply directly.

Or

Clicking either labels:

- The archive first date (i.e., the object first archiving date) located to the left.
- The Present located to the right.

Once you have defined a date and time, you can browse the Archive Tree to see the objects it contained at that specific date and time.

Important: When the Time Navigation feature is being used, the Archiving option of the right-click menu in the Resource Explorer is grayed out. No archiving in the past is authorized.

The Time Navigation pane indicates you permanently the date and time at which you are browsing the Archive tree.

The Time Navigation period changes in accordance with the selected object:

- For the root archive and folders, this period starts always the 01/01/1970 and runs to the present.
- For a directory or a file, this period starts always the object first archiving date and runs to the present.

The Basket

The Basket is the central point for confirming all types of requests (Figure 8).

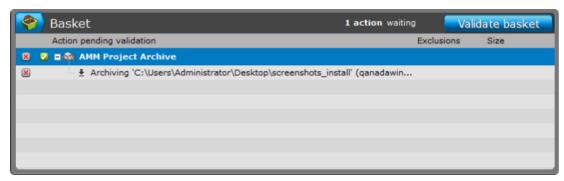


Figure 8: The Basket is located below the Explorers

When a user requests an operation from the Miria User Interface, it does not take place until the user confirm it.

These are the operations a user can request:

- Archiving
- Retrieval
- Copy
- Move
- Delete

Requests pending confirmation are stored in the basket. If the basket is empty, then no action is pending confirmation.

See Checking Operation Requests in the Basket for details on the basket contents.

Favorite Archives

You can create favorites with your favorite archives so that you can access them directly without scanning the entire archive list.

To create favorite archives

- 1. From the left pane, select the archive that you want to set as a favorite.
- 2. Click the star icon at the top right corner of the right-hand Explorer.

 The favorite archive now displays in the Favorites tab of the left pane (star icon).

To open a favorite archive

- 1. From the left pane, click the Favorites tab. The list of favorite archives displays.
- 2. Click the archive that you want to open. It opens in the right-hand Explorer.

Setting Display Preferences

To set preferences

• From the Title Bar, click the Preferences button.

The Preferences pane opens and displays these tabs:

File System Options

The Display Options specify whether you want to Display File Size and/or Display the last modification date for files in the Resource Explorer.

Messages / Alarms

The Display notification at connection time option enables you to specify whether to display the alarm notification pop-up message at connection time. Clear this check box if you do not want to display these messages.

Metadata

The Display metadata as a tree option enables you to specify whether to display the metadata and their organization as a file tree rather than as paths. Select this check box to display metadata in this manner.

Miria Information

The Miria Information pane provides information about the Miria environment. Its fields are not editable.

Field	Description
Product Name	Miria.
Product Version	Version of the Miria User Interface you are using to connect to Miria. The Product Version and the Server Version must be the same.
	Between parenthesis is displayed the compilation date and time of the Miria User Interface.
Miria Server	Name of the machine hosting the Miria server to which this User Interface is connected.
Server Version	Version of the Miria Server software. The Server Version and the Product Version must be the same.
Server ID	ID specific to the Miria database being used, and is calculated when the database is created. It permits identification of the database when there is more than one database available within your Miria installation.
Database Name	Name of the Miria database used in this session.
ProxylO Domain	Logical domain that you specified for the Proxy I/O feature when you logged in to the Miria User Interface.
User Name	Name of the user currently logged in on this session.
Session Number	Number of the session.
Language Environment	Language of the interface.

Modify the Preferences as needed and click Return to go back to your archive.

CHAPTER 2-Organizing Archives

This topic explains how to structure data within archives in the Miria User Interface.

You can also sort archives into an *Organization* —a superstructure similar to a directory tree. Organizations are created by the administrator, but are visible in the Miria User Interface when you open it to select a project archive.

Archives

An archive is a data repository in which your data is archived for long-term retention. In the archive, data is classified in folders and sub-folders that you can organize at your convenience.

In the Figure 9, the data is classified into three levels of categories: the customer, the year the document was issued, and the type of content:

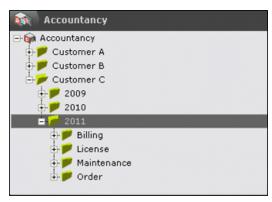


Figure 9: Archive folders and sub-folders

Archive Types

These are the two archive types:

- **User archive** Belongs to one user and can only be accessed and managed by its owner. There is only one user archive per user.
- **Project archive** Can be accessed by multiple users, as defined by the Administrator. The administrator can grant a user access to several project archives.

Permissions

When you log in to Miria User Interface, it displays only the archives that you are allowed to access (i.e., your own user archive, and all the project archives that you share with other users).

It is up to the Administrator to define the level of permissions granted to each user to manage project archives.

These archive operations require specific permissions:

- Opening and viewing archives
- Creating archive folders

- Renaming archive folders
- Deleting archive folders
- Moving archive folders within archives
- Renaming archived files and directories
- Moving files and directories within archives
- Deleting archived files and directories
- Modifying file extensions
- Managing metadata

Archive Contents

An archive contains archive folders and sub-folders, in which directories and files are archived.

Archive Folders and Sub-Folders

Miria use folders and sub-folders to organize the archived data in a file tree structure. In the right-hand Explorer, they are represented as horizontal green folders.

You can both manually create and organize folders to classify your archived data.

Folders can also be generated by automatic archiving tasks set up by the Administrator, or by external tools.

Automatically Generated Folders

These processes can generate folders automatically:

Automatic archiving tasks controlled by the Administrator.
 Such tasks send the data to a folder which mirrors the location of the data on the source platform. This folder has a path of the structure:

<source machine>\<source machine OS>\root path on source>

For example, the Figure 9shows the Accountancy archive in which an automatic archiving task has created a directory. The source data in this archive came from the doc machine, which was running Windows, and that the root directory from which data was archived was:

C:\DOC_FILE_SERVER\Orders

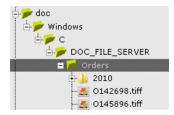


Figure 10: Archive example

External tools.

When Miria is used with certain external tools (e.g., Apple's Final Cut software).

For more information, see the Miria for Partner Applications Documentation.

Important: Atempo strongly recommends that you keep separate archives for Automatic Archiving Tasks and manual drag-and-drop tasks, and that you do *not* rename or move automatically generated directories or their contents. If you do so, the directory will be recreated in its previous form the next time the Automatic Archiving Task is run. Moreover, other automatic tasks, such as Automatic Retention or Deletion, may no longer function correctly.

Archived Directories and Files

Standard Objects

Archived directories and files are located in archive folders. In the right-hand Explorer, the archived files are represented by an icon indicating their application, and the archived directories are represented by a vertical yellow folder icon.

Bundle Objects

When you use Miria with certain external software solutions (e.g., Apple's Final Cut), or when you archive Miria database backups, objects may be archived in the form of *bundles*.

A bundle displays as a single unitary file with its own icon, but it is composed of other files. You cannot open a bundle or handle it like normal directories and folders. The only operation you can do on a bundle is to rename it.

Note: A bundle file may contain another bundles.

If you need to access individual files within the bundle (e.g., to retrieve only certain files), right-click the bundle object and select Show Package Contents.

The Figure 9shows the DB Backup archive. It contains the Miria bundle which gathers all database backups. This bundle contains directories which contains other sub-bundles (i.e., FULL, LOG, and RECOVER_SCRIPTS). Right-click the bundle and choose Show Package Contents to open it and retrieve its components.

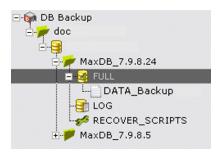


Figure 11: DB Backup archive

Linked Files

Some objects, archived only once in Miria, display at multiple points in the tree structure. This is the case with certain files contained within bundles that were archived with external software solutions, such as Apple's Final Cut. For example, the same Final Cut Pro file can display in a bundle associated with its project, a bundle associated with its production, and in an automatically generated folder containing all Final Cut assets.

Right-click these objects in the archive and select Link List to display all the paths to the same object within the archive.

Managing the Archive Structure

These operations are available to help you organize archives, provided that the Miria administrator granted you the appropriate rights:

To create folders and sub-folders

- 1. From the Miria User Interface left pane, click an archive.
 - The archive displays in the right-hand Explorer.
- 2. Right-click the archive and select **Add Folder**.
 - To create a sub-folder, right-click a folder and select Add Folder.
 - The organization operation displays in the basket.
- Click Validate basket.

The folders and sub-folders are created.

Note: In the right-hand Explorer, a folder that has been created but not validated displays with a red exclamation mark. Such folders are not available for use until they are validated

To rename folders or archived files/directories

- 1. From the Miria User Interface left pane, select an archive.
- 2. Right-click an archive folder or archived file/directory and select **Rename**.
- 3. Enter a new name.

The organization operation displays in the basket.

4. In the basket, click Validate basket.

The folder/sub-folder is renamed.

To move data from one folder/sub-folder to another

- 1. Right-click a file/folder and select Cut.
- 2. Right-click the destination folder and select Paste.

The organization operation displays in the basket.

3. In the basket, click **Validate basket**.

The data is moved.

Deleting Folders or Archived Files/Directories

Deleting an archive folder deletes the folder and all its contents from the archive; however, the deleted data will temporarily remain on the archiving storage. It will eventually be completely removed by a maintenance task, which runs on a regular basis.

To delete objects in the archive

- Right-click an archive folder or archived file/directory and select **Delete**.
 A prompt asks you to confirm your choice.
- 2. Click Yes.

The folder or archived file/directory is deleted.

To delete organization requests

• In the basket, right-click the action in the list, then select Delete.

The organization request is deleted.

Note: To cancel the creation of nested folders, start by deleting the folder located at the lowest level and work up the folder tree to delete higher level folders.

Reaching a Folder or an Archived File/Directory

Even when an archive contains a great number of folders, sub-folders, and archived objects, you can quickly reach a specific object if you know its path in the archive.

To reach a folder or archived object

- 1. From the **Miria User Interface left pane**, select an archive.
- 2. Right-click anywhere in the archive window, and select **Go to path**.
 - The **Enter your path** window opens.
- 3. In the field, enter the absolute path of the object in the archive. Use the Unix-like path syntax with slashes (e.g., folder/subfolder/directory1/file1.pdf).
- 4. Click Validate.

The archive file tree unfolds and the object is highlighted.

Applying Metadata to Folders and Archived Objects

To categorize the archived data and make it easier to find a particular file among all archived data, you can manually apply metadata to these objects:

- The entire archive.
- The archive folders.
- The directories or files that are already archived.

Such metadata is defined and managed by the Miria Administrator through the Miria Administration Console.

In order for you to apply metadata, the Administrator must grant you the Manage Metadata permission. If you do not have this permission, you can still view the metadata already applied to the archived file or folder.

To apply metadata to an archive folder or archived data

1. From the left pane, select the archive in which you want to apply the metadata. The archive displays in the right-hand pane.

- 2. Select the object to which you want to apply the metadata:
 - The entire archive.
 - An archive folder.
 - An archived file or directory.
- 3. Right-click the object and select **Manage Metadata**.

The **Instances** window opens. The selected object is displayed on the left in the **Name / Archiving Date** column, and the corresponding Metadata is displayed on the right.

The metadata are sorted under their organizations.

- 4. If you do not want to apply metadata to all the archived versions of a file, double-click the file in the **Name / Archiving Date** column to display the list of instances, then select the desired instance.
- 5. From the **Metadata List**, deploy the organizations and select the metadata you want to apply.

For each selection, click the **Plus** arrow, in the center of the pane.

The metadata you selected displays in the right pane.

Note: If you need to remove any of the metadata, select the item and click the Minus arrow to send it back into the Metadata List.

6. Click **Define a value** to specify a value for the metadata.

The value format depends on the metadata type. It can be a date, a string, a check box, a list of choices, a duration, or a numeric value (Figure 12).

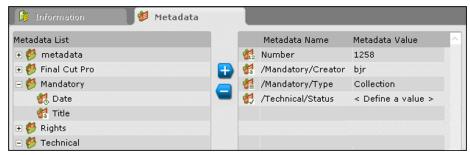


Figure 12: The value format can depend on the metadata type

7. Click **Validate** once you have added all the metadata.

For information on how to use metadata during a search, see Searching for Archived Data and Searching for Archived Data.

CHAPTER 3-Archiving

This topic explains how to archive data through the Miria User Interface.

Archiving Principles

Archiving means collecting, classifying, and storing data for long-term protection. Miria lets you migrate your data to a storage location, where it remains available for future retrieval.

The data that you archive is processed differently depending on how the administrator configured Miria. These are the configuration options:

- The data can be deleted from its original location once it has been migrated to the archiving storage.
- The data can be replaced by a *stub*.
 This means that once your file has been archived, it is still visible at the original location in the form of a pointer, but its contents are migrated to the archiving storage.
- The data can remain in its original location and be copied to the archiving storage.

Instances

When you archive a file several times under the same name and in the same folder, the right-hand Explorer displays it only once; however, each time you archive the file, Miria creates a new instance of it that can then be retrieved independently.

Metadata

Metadata is information about the contents of the data that you specify when you archive data. It is similar to keywords as it enables you to categorize the contents of the data.

The administrator controls whether metadata is mandatory; you may or may not have to specify the values for metadata.

See Archive Search for details.

Retention

An archiving configuration includes a retention period. The retention period is the length of time that data is retained.

When the retentionis has expired, archived data is deleted and can no longer be retrieved. To avoid being unable to retrieve your data because the retention period has expired, ask your administrator about the retention period in effect.

Permissions

When you log in to Miria User Interface, it displays only the archives that you are allowed to access (i.e., your own user archive and all the project archives that you share with other users).

It is up to the Administrator to grant the permissions to each user to perform these operations:

- Open archives in the right-hand explorer.
- Archive data.

Archiving Data

You archive files and directories by dragging them from the platform file system to the appropriate archive folder. The platform file system can be either the local file system or the file system of any archiving platform declared in Miria.

Once the objects selected, the archiving request is placed in the basket, where you can validate or delete it.

To archive data

- From the bottom section of the Miria User Interface left pane, select the platform or platform pool where the files to archive are located (i.e., the source platform).
 Select My file system if the source files are located on the local workstation.
 The Resource Explorer displays the source platform content.
- 2. From the upper section of the left pane, select an archive. Its contents displays in the right-hand Explorer.

Important: If the Time Navigation feature is being used, the right-click menu Archiving option is grayed out. No archiving in the past is authorized.

- 3. In the right-hand Explorer, highlight the archive element where you want to archive data. You can choose from these elements:
 - The archive root.
 - A folder.
 - A sub-folder.
- 4. In the **Resource Explorer**, right-click the file or directory to archive, then select **Archive**. The basket displays the archiving operation (Figure 13).

Note: The Exclusions column indicates the number of excluded files. See Getting Information about Excluded Files for details.



Figure 13: Archiving operation waiting for validation

5. Click Validate basket.

- 6. If the Administrator has configured metadata, the Metadata window opens, containing the list of all metadata available for this archive.
- 7. Enter a value for the metadata of your choice by clicking **Click here** to enter metadata value.

Note: The metadata preceded by a red star are mandatory. You must enter a value for them to proceed with the archiving.

8. Click Validate.

To delete an archiving request

1. Right-click the request that you want to delete, then click **Delete**.

A prompt asks you to confirm the deletion of the archive request.

2. Click Yes.

The archiving operation is deleted.

With the Miria User Interface on Unix, you can archive any data located on a machine where the Miria agent is installed.

Archived Object Information

The right-hand Explorer provides this information on archived objects:

Getting Information on Archived Objects

Miria User Interface provides information about archived files, directories, links, etc. If objects were archived several times under the same name at the same location, you can view details about each instance archived.

To get information on archived objects

- In the right-hand Explorer, right-click an archived file or directory, and select Instances.
 The Instances window displays in the Resource pane.
- 2. From the **Name / Archiving Date** column, select an archiving instance.

The right-hand pane displays these tabs:

- Information
- Metadata

The Information tab contains the Instance Details pane and the Action buttons.

This table describes the fields of the Instance Details pane:

Property	Description
Archiving Date	Date and time the file or directory was sent to the archive.

Property	Description
MIME Type	MIME Type property of the archived file. The MIME type is a two- part identifier of file formats, for example:
	<pre>audio/mpeg, video/quicktime, or text/plain.</pre>
	It is a more reliable indicator of file format than the file extension.
	This property displays only if the administrator has configured Miria to recover it.
File Size	Size of the file or directory in KB.
Creation Date	Date the file or directory was created, independent of the archive.
Last Update	Last time the file or directory was modified, independent of the archive.
Last Access	Last time the file or directory was consulted without modification, independent of the archive.
Owner User	User who owns the file or directory.
Owner Group	Group of the user who owns the file or directory.
Original Location	Original location of the file on the user's machine. If the file was archived from a network drive, this displays the path from the network drive (e.g., X:\Data\MyData).
Global Path	Global Path of the file original location.
File Path on Source	File Original location on the Primary Storage.
Digest Type during Archiving	Type of digest that is calculated on the file at the moment of archiving on the storage when performing multiple writing. It verifies whether the file content is the same on all storage (i.e., [None], MD5, SHA-1, SHA-256, SHA-384, or SHA-512).
	See the Miria Administrator's Documentation for details.
Digest during Archiving	Value of the above digest, if this was used.
Link Target	Path of the target file/directory to which the link points on the source disk. Displays only if the archived object is a symbolic link.
Alternate Stream	Indicates whether the alternate streams (i.e., file attributes, rights, etc.) are archived in this instance.
	Possible values are Yes or No.

3. Select the **Metadata** tab.

See Viewing Metadata Information for details.

Information on Storage

Miria User Interface provides information about the storage that hosts the archived files and directories. If objects were archived several times at the same location, you can view storage details about each instance archived.

To get information about the storage

1. In the right-hand **Explorer**, right-click an archived file, and select **Instances**.

The **List of Instances** window displays.

2. From the Name / Archiving Date column, double-click an archiving instance.

The list of the associated storage manager containers displays below the instance.

3. Select the desired storage manager container.

The right pane displays this information and metadata:

Property	Description
Session Details (General)	 Storage Manager Type. Type of storage manager used (e.g., Miria File Storage, Media Manager, HCP, etc). Storage Manager. Name of the storage manager as configured in Miria. Storage Manager Container. Name of the storage manager container as configured in Miria. Compression Format. See the Miria Administrator's Documentation for details on compression. Storage Manager Digest Type. Type of digest. This digest ensures that the object you retrieve has not been modified on the storage and that it is identical to the object that was archived. Storage Manager Digest. Value of the above digest, if this was used.

Property	Description
Session Details (Media)	These properties are displayed only for an Miria File Storage Container o Media Manager storage manager container.
	 Stream Info. This field gives information on the media. It is displayed as a series of numerical values separated by commas, which define, in turn: Stream Node - An ordinal number describing each job that was sent to this media. Each job writing to the media increments this number by one. Start Object - The position on the media where the file starts, including its wrapper (metadata, formats, etc.). Start Data - The position on the media where the actual data part of the file starts. End Data - The position on the media where the data ends. End Object - The position on the media where the object ends. Point to the values in the second column, and the values display with their captions. View button. Click the View cartridge button on the Stream Info line to open the Media List interface. See Viewing the List of Media Used for Archiving for details on the Media List.
Retention Information	 Retention. Name of the retention period associated with the archive where the file is stored. Retention Date. Date and time of the end of retention period.
Deduplication Information	 Deduplication Domain. Name of the deduplication domain as configured in Miria. Digest Type. Type of the deduplication digest that is calculated at archiving time to verify that the new file to be archived is unique (SHA-1, SHA-256, SHA-384, SHA-512, or Filename/Size). Digest. Value of the deduplication digest, if this was used. Reference Count. Number of times a file with the same digest has been archived.

Viewing Volume Information

You can view the volume that an archived object (i.e., a main folder or directory, a sub-folder or directory, or an individual file), occupies in the storage.

To view the Volume Report

• In the main archive tree or the retrieval basket, right-click an archived object and select **Volume Report** from the pop-up menu.

Or

Select the object in the **List of Instances** as described in **To get information on archived** objects, and click the **Volume Report** button at the bottom of the **Instance Details pane**.

The Volume Report window displays the number of files and sub-folders or sub-directories in the selected folder or directory, as well as its volume occupancy in KB, MB, or GB, as appropriate.

If you run this option on a large object (i.e., a high-level folder or directory containing many files), it can freeze the Miria Administration Console while it calculates the result. The only way to unfreeze the screen is to wait for the end of the process.

Multi-selection is not available with this option.

To get information about the volume that all archived objects occupy, see Viewing Volume Report.

Viewing the List of Media Used for Archiving

If your files are archived in media-based libraries, such as Miria File Storage Container or Media Manager, you can view the list of the media (cartridges or container files) containing your files, and their associated properties.

To view the Media List window, you must have the appropriate permissions on media. See Managing Media for details.

To view the media list

1. In the right-hand **Explorer**, right-click an archived file, and select **Instances**.

The **List of Instances** window displays.

2. From the **Name / Archiving Date** column, double-click an archiving instance.

The list of the associated storage manager containers displays.

- 3. Select the desired storage manager container.
- 4. In the **Session Details**, click the **View cartridge** button.

The **Media List** window opens.

It describes where the instance is located on the cartridge or .pax file

If the media is a cartridge, it is identified by its barcode. If the media is a .pax file from a File

Storage Container, it is identified by its name.

Such information on media is only useful for the Miria administrator. Most users are not concerned with those values.

File Detail	Description
Name	Name of the media on which the instance is archived.
Position on Tape	PAX only. Position of the archiving session on the media. If the value is 0, the session is located at the beginning of the media. The next session is in position 1, the third session in position 2, etc.
Partition	LTFS only. Indicates the name and ID of the LTFS partition on which the data is located (e.g., Index (0), Data (1)).
Tape File Offset	Where the archived session begins on the media. This information allows Miria to locate the file on the media at retrieval time.
Size	Size of the file on the media. If the file spans over more than one media, this size will be smaller than the actual size of the archived file.
File Offset	Where the media begins in relation to the archiving session. This value is 0 for the first media used to archive the session. For the other media, it corresponds to the size of their preceding media.

Select a media to display more details in the Details tab below it.

See the tables in Viewing the Media Lists for a description of each media parameter.

To perform actions on media

- 1. Display the media list as described in To view the media list.
- 2. From the List or Graphic view, right-click a media and select the action that you want to perform on this media from these options:
- Close
- Reopen
- Recycle
- Scratch
- Change LTFS Volume Name (LTFS only)
- Change Comment
- Duplicate (PAX only)
- Request Ejection

To perform actions on media, you must have the appropriate permissions on media.

For information about media settings and actions on media, see Managing Media.

Viewing Metadata Information

If you have selected metadata after validating your archiving request in the basket, or if you archived data from an external application with metadata, then these metadata have been attached to the file instance during archiving.

For each instance, you can display these metadata categories:

- Metadata manually applied by the user during archiving.
- Metadata automatically collected by Miria from audiovisual formats.
- Metadata automatically generated by external media applications, such as Final Cut Pro, Final Cut Server, or Avid Interplay.

To view metadata information

1. In the right-hand **Explorer**, right-click the archived file or directory, and select **Manage Metadata**.

The **Metadata** tab displays.

Column	Description
Metadata List	List of metadata that you can add to the instance.
Metadata Name	 Full path of the metadata, in the form: organization_name/metadata_name. Or organization_name/metadata_label.
Metadata Value	Value of the metadata that the user has chosen or that an external application has defined during archiving.

2. Click Return to close the window.

CHAPTER 4-Searching for Archived Data

This topic explains how to search for archived data in the Miria User Interface.

Archive Search

If your archive contains a great number of objects, you may find it difficult to locate an archived directory or file that you want to retrieve. The Miria search feature enables you to easily locate the desired file.

These are the two search types:

Searching for Archived Data Using Criteria

Search criteria are based on file properties, such as the name, size, date of creation, etc., and contents.

You can perform the search by applying criteria at these levels:

- Within an entire archive.
- · Within an archive folder.
- Within an archived directory.

You cannot perform a search over all the archives.

To search for archived data using criteria

- 1. In the right-hand **Explorer**, select the archive, folder, or directory in which you want to perform the search.
- 2. From the left pane, click the tab with the magnifying glass icon. The **Search** window opens in the right pane.
- 3. Click the Criteria search tab.

4. Specify the criteria of your choice:

Property	Description
Object Name	Enter the name of the object that you want to locate. You can use these wildcards: * to replace 0 or more characters. ? to replace one character. Select the Consider Case check box if you want your search to be case-sensitive. Examples: • If you want to find the mydocument.doc file, you can enter either the string "document" or "*document*". In both cases, the result set contains objects such as mydocument.doc, hisdocument2.doc, document4. • If you enter the string "document?", the result set contains only objects whose names contain the term documen, plus one character (e.g., documentA or document"). • If you enter the string "documen*", the result set contains only objects whose names start with documen, plus any number of characters (e.g., document, document5.doc, or documentation.doc), but not files such as mydocument.doc. • If you enter the string "document?.*", the result set contains objects whose names contain the term documen, plus one characters (e.g., document, document5.doc, or document.doc. • If you enter the string "document?.*", the result set contains objects whose names contain the term document, plus one character (i.e., the dot), plus any number of characters (e.g., document5.doc, document5.doc, or document5.pdf), but not files such as document5.doc, or document5.pdf), but not files such as document3.doc.
File Size	 Choose the size of the object that you want to locate: Small - finds files smaller than 100 KB Medium - finds files smaller than MB Big - finds files greater than 1 MB Specify Size - enter the minimum and/or maximum values and select the unit. For example, to define a size between 2 MB and 1 GB, select Specify Size, select greater than 2 MB, select the check box next to the second of the two drop-down lists, and select smaller than 1 GB.

Property	Description
Object Type	Select the type of objects that you want to locate. Thes are the valid values: Folders Directories Files Symbolic Links
Archiving Date	Specify the date when the object was last archived. You can define the dates using one of these options: Start Date. Predefined Period. These are the options: Today - from 00:01 the current day Yesterday - from 00:01 to 00:00 the previous day Current Week - from Monday Floating Week - the last seven days Previous Week - Monday to Sunday Month in progress - from the first day of the month Floating Month - from the date in the previous month that is equivalent to today's date plus 1. For example, if today is the 15th of March, this starts the search on the 16th of February. Previous Month - calendar period from the first to the last day of last month Current Year - from the most recent January 1st. Floating Year - between today and the date last year that is equivalent to today's date plus 1. For example, if today is the 15th of March 2007, the search starts on the 16th of March 2006. Previous Year The n last months. The n last days.
Creation Date	Specify the date when the object was created. Define the date in the same way as for Archiving Date.
Contents	Applies only to text documents. Enter a text string to search by file contents. You can use boolean operators (i.e., AND, OR, and NO).

5. After selecting a criterion, click the Plus (+) button to the right of the criteria field. The criteria is added to the table on the right.

Note: You cannot add more than one criterion of the same type.

- 6. Repeat the operation for each criterion that you want to add, and click **Run the Search**. The search is run and the result displays at the bottom of the window.
 - **Note**: If there are several criteria, the search is run with an AND operator. The result shows the objects matching all the criteria.
- 7. To retrieve the object, select it and click the **Retrieve** button in the upper right of the **Results pane**.
- 8. To select a specific instance of the object for retrieval, click the **Instances** button in the upper right of the **Results pane**.
 - See Retrieving a Specific File Instance for details.

If you are searching a specific archive folder, you can move up one folder and increase the search range by clicking the search range by clicking the search range.

Searching for Archived Data Using Metadata

Metadata is information on the contents of the data that was applied to objects either during the archiving process, or after they were archived.

If the archives you are allowed to access have metadata associated with them, you can use that metadata as keywords to find archived files and directories.

The search by metadata searches within your personal archive and all the project archives that you are allowed to access.

To search for archived data using metadata

- 1. From the left pane, click the tab with the magnifying glass icon. The **Search** window opens in the right pane.
- 2. Click the **Metadata Search** tab.
- 3. Select the desired metadata and click the **Plus** (+) button to send them to the right column.
- 4. Define the metadata value by clicking **the Define a value field** in the **Metadata Value** column.

If you select several metadata, the search is performed by default with an *or* operator, and the result includes all the objects meeting at least one of the metadata criteria.

You can also choose your operator from these options:

Search Operator	Description
OR	The result includes all the objects meeting at least one of the metadata criteria.
	The result includes only the objects meeting all metadata.

Search Operator	Description
Recursive	The result includes the objects meeting all metadata, knowing that the objects inherit the metadata of their parent archiving folders. For example:
,	 If a metadata "doc-type = invoice" is set at folder level. And a metadata "doc number = 322" is set on an object contained in this folder. Then a search combining both metadata with the recursive and ("doctype = invoice" and "doc number = 322") finds the document.

Note: The icon of the active operator displays a green background.

- 5. Click **Run the Search**. The result returns the list of these matching items:
 - Archives and folders for metadata applied to already archived objects
 - Archiving jobs and instances for metadata applied at archiving time
- 6. Double-click one of the result lines. Miria User Interface opens the appropriate window, based on the selected result type:

Result Type	Action
File, Directory, or Folder	The corresponding archive opens with the appropriate object highlighted.
Instance	The List of Instances window opens, with the appropriate instance highlighted.
Job	The Search by Criteria window, pre-configured for the selected job, opens.

7. If you want to refine your search within a job, run a search by criteria as described in step 5. and step 6. of the Searching for Archived Data Using Criteria procedure.

Managing Search Favorites

If you regularly use the same search patterns to search for archived objects, you can save them as favorites.

Setting up search favorites allows you to reuse criteria or metadata values, rather than reentering them each time you perform a search. This is particularly useful when performing a search involving dozens of metadata.

You can set up favorites for searches on both Criteria and Metadata.

To create search favorite

1. From the left pane, click the tab with the magnifying glass icon.

The **Search** window opens in the right pane.

2. Add your criteria or metadata values as if to perform a search.

See Searching for Archived Data Using Criteria and Searching for Archived Data Using Metadata for details.

3. Click the Favorite button in the top right corner.

The Favorites windows opens.

4. Enter a descriptive name for your search favorite, and click Validate.

Your favorite is added to the list in the left pane under the **Criteria** section or the **Metadata** section, depending on the type of search.

Running a Search from the Favorite List

1. From the left pane, click the tab with the magnifying glass icon.

The search favorites open below the Criteria and Metadata sections.

2. Click the favorite search that you want to run, and click Run the search.

Renaming a Search Favorite

1. From the left pane, click the tab with the magnifying glass icon.

The search favorites open below the Criteria and Metadata sections.

- 2. Right-click the favorite that you want to rename, and select **Rename**.
- 3. Enter the new name and press **Enter** to validate.

The favorite is renamed.

Deleting a Search Favorite

1. From the left pane, click the tab with the magnifying glass icon.

The search favorites open below the **Criteria and Metadata** sections.

- 2. Right-click the favorite that you want to delete, and select **Delete**.
- 3. Confirm the favorite deletion.

The deleted favorite is removed from the left pane.

CHAPTER 5 - Retrieving Data

This topic explains how to retrieve data with the Miria User Interface.

Retrieval

Retrieving a file means transferring it from the device where it is archived to your workstation or any other computer where you can view or edit it.

To determine which archive or archive folder contains the objects that you want to retrieve, you can perform a search. Once you have found your object, you can retrieve it directly from the Search window.

See Searching for Archived Data.

By default, if you are retrieving data from a Media Manager storage manager, all the media required for the retrieval must be online and available for use at the moment of the retrieval. If this is not the case, the warning icon displays next to the retrieval job in the Alarms or Messages. See Viewing the Media Requested by a Job for details.

Permissions

When you log in to Miria User Interface, it displays only the archives and the platforms that you are allowed to access.

It is up to the Administrator to define the permissions granted to each user to perform these operations:

- Open the file systems of Miria platforms in the Resource Explorer.
- Retrieve data.

Retrieval Destination

You can retrieve the objects to the directory of your choice:

- Custom location. For each object that you retrieve, you can manually specify the
 destination directory.
- **Original location.** If the objects were archived within a file tree automatically generated by a task, Miria retrieves them in the directory where they were originally located on the primary storage.
- **Default automatic location.** Miria retrieves the objects to a predefined path.

 The administrator must previously specify this path via the *Default Retrieval Root Path* parameter.

Standard vs. Partial Retrieval

Depending on the file format and the retrieval options that the administrator has set, these two types of retrieval are possible:

• Standard. Retrieves an entire file.

• Partial. Retrieves only a specific sequence of a media file, based on time codes.

Partial retrieval applies only to .mxf and QuickTime (.mov) formats.

This feature requires a specific license key to be activated. Contact Atempo for details.

Retrieving Archived Data

The easiest way to retrieve an archived file is to retrieve its latest instance; however, you can also retrieve any file instance by selecting it from a list of instances.

For details on retrieving archived data, see these topics:

Retrieving a File Latest Archived Version

The Miria User Interface on Unix enables you to retrieve data to any machine where a Miria agent is installed.

To retrieve data

- 1. From the Miria User Interface left pane, select an archive.
 - The right-hand **Explorer** displays its contents.
- 2. From the left pane, select the platform where you want to retrieve the files (i.e., the destination platform).
 - Select My file system to define the local workstation as the destination platform.
 - The **Resource Explorer** displays the destination platform contents.
- 3. In the **Resource Explorer**, highlight the part of the computer's file system where you want to retrieve data.
- 4. In the right-hand Explorer, right-click the object to retrieve, then select **Retrieve**.

The **Retrieval Destination** window opens.

- a. Either fill in the **Destination field** manually or click **Browse**.
- b. In the **Browse For Folder** window, select a new destination and click **OK**
- c. Click Validate.

The retrieval operation opens in the basket.

5. Click Validate.

The data is retrieved in the desired directory on the destination file system.

To delete a retrieval request

1. Right-click the request that you want to delete, then click Delete.

A prompt asks you to confirm the retrieval request deletion.

2. Click Yes.

The retrieval is canceled.

Retrieving a Specific File Instance

For a file that has been archived several times, all its versions are available for retrieval. These versions are called *Instances*.

For a folder that has been archived several times, all the instances of the files within the folder are available for retrieval.

To retrieve a file instance

- 1. From the Miria User Interface left pane, select an archive.
 - The right-hand **Explorer** displays its contents.
- 2. From the left pane, select the platform where you want to retrieve the files (i.e., the destination platform).
 - Select My file system to define local workstation as the destination platform.
 - The **Resource Explorer** displays the destination platform contents.
- 3. Expand the file tree nodes down to the level from which you want to retrieve the data.
- 4. Right-click the object to retrieve, and select **Instances**.

Or

Search for the file to retrieve using Criteria.

When you have found it, select it in the search Results and click the **Instances** button in the pane upper right corner.

See Searching for Archived Data Using Criteria for details.

The Instances window displays the instance list for a given file in the archive.

Clicking the Plus (+) sign next to an instance shows the storage manager container in which the instance has been archived, along with its video proxy, if any.

- 5. From the **Name / Archiving Date** pane, select the archiving instance to retrieve.
 - The corresponding information and metadata display in the right pane.
 - See Archived Object Information for details on the **Instances** window.
- 6. Click **Retrieve**.
 - The **Retrieval Destination** window opens.
- 7. Choose the destination option as described in Retrieval Destination Window.
- 8. Click Validate.
 - The retrieval operation opens in the basket.
- 9. Click Validate basket.
 - The file instance is retrieved.

Retrieval Destination Window

The Retrieval Destination window enables you to choose the directory to which you want to retrieve your data.

Field	Description
Custom Loca	ation tab.
Source	Not editable field. Indicates the object location in the archive.

Field	Description
Destination	Specifies the absolute path directory to which you want to retrieve the objects.
	Click Browse or enter the path manually.
	Note : The selected path must be a path existing on the file system displayed in the Resource Explorer.
Automatic loc	cation tab.
Source	Not editable field.
	Location. Indicates the object path in the archive.
Destination	Not editable fields.
	 Original Location (Task - Full Path Auto-generated). Indicates the directory path in which the object was located before archiving.
	If you select this option, Miria retrieves the objects to this original path.
	Note : This option is only available if the object to retrieve was archived through a task with an auto-generated full path. See the Miria Administrator's Documentation for details.
	 Default Retrieval Root Location (Setting). Indicates the path of the default retrieval directory.
	When you select this option, Miria retrieves the objects to this default directory.
	Note : This option is only available if the administrator has defined the Default Retrieval Root Location parameter.

Managing Video Assets

The partial retrieval enables you to retrieve only a sequence of a much larger media file.

See Partially Retrieving Video Assets for details.

Partially Retrieving Video Assets

You can partially retrieve video assets of .mxf or QuickTime (.mov) formats, based on a time code. It enables you to retrieve only a sequence of a much larger media file, which saves time and resources when you only need one portion of the file.

This feature requires a specific license key to be activated. Contact your Administrator or Atempo for more information.

To perform a partial retrieval, the files must have been archived with the *Collect partial retrieval metadata during archiving* advanced setting enabled. This advanced setting must be set by the Miria administrator.

To retrieve a sequence of a video file

1. From the Miria User Interface left pane, select an archive.

The right-hand **Explorer** displays its contents.

- 2. From the left pane, select the destination platform (i.e., the place where you want to retrieve the files). Either:
- The platform or platform pool for a network destination.

Or

• The My file system option for the local workstation.

The **Resource Explorer** displays the destination platform contents.

3. From the right-hand **Explorer**, right-click the video file to retrieve, then select **Instances**.

The **Instances** window opens.

- 4. Select the instance to retrieve and click Retrieve partial file.
- 5. Set the Start and End times to select the time sequence to retrieve.
- 6. Select the Same as input check box if you want the Start timecode of the retrieved file to be the same as the Start timecode of the original archived file.

For example, if the archived file had a Start timecode of 01:00:00, the Start timecode of the retrieved file is 01:00:00.

If you do not select this box, the Start parameter of the retrieved file is 00:00:00:00.

Note: This value is independent of the Start of the time sequence. It refers to the Start timecode parameter that you can view and edit in a video editor.

7. Click Retrieve.

The **Retrieval Destination** window opens.

- 8. Choose the destination option as described in Retrieval Destination Window.
- 9. Click Validate.

The retrieval operation displays in the basket.

10. Click Validate basket.

Miria retrieves the selected sequence of the media file in the appropriate format.

CHAPTER 6 - Copying Data

This topic explains how to copy data through the Miria User Interface:

About Copy

Copying data consists in moving data from one Miria platform to any other, whatever the operating system. Miria simply moves or copies the files and directories as they are, without processing them (e.g., it does not associate any metadata or store any instance information in the Miria database). You cannot search for copied objects or retrieve them through Miria as you do with archived objects.

The copy operation can perform two types of actions:

- Copy the data. Miria copies the data from one platform to another. After the copy takes place, the data is present on both the source and the destination platforms.
- **Move the data.** Miria moves the data to another platform. After the copy takes place, the data is no longer present on the source platform, but only on the destination platform.

The Miria administrator sets in the Miria Administration Console the *Data Mover Action* advanced setting that determines the type of action performed by the copy operation (i.e., copy or move).

Permissions:

When you log in to Miria User Interface, it displays only the file systems of the platforms that you are allowed to access.

It is up to the administrator to define the permissions granted to each user to open the file systems of Miria platforms in the Resource Explorer.

Copy of Data

In this procedure, you must use two platform types:

- Source platform. Platform where the data to copy or move is located.
- **Destination platform.** Platform where the data will be copied or moved.

Important: If files or directories with the same name already exist in the destination directory, the copy operation overwrites them without notice.

To copy data

- From the Miria User Interface left pane, select the source platform or platform pool.
 Select My file system if the source files are located on the local workstation.
 The Resource Explorer displays the source platform contents.
- 2. From the left pane, right-click the destination platform or platform pool, and select **Open in** the right-hand Explorer.
 - The right-hand Explorer displays the destination platform contents.
- 3. In the right-hand Explorer, highlight the directory to which you want to copy the object.

4. In the Resource Explorer, click the file or directory to copy and select **Copy** from the contextual menu.

When you request an object copy operation, Miria reads the **Data Mover Action** advanced setting value to determine the behavior that it must adopt, either copy or move the object.

To change this default behavior, while you select the Copy option from the contextual menu, keep pressed the:

Control key to copy the object.

Or

Shift key to move the object.

The basket displays the Copy, Move, or Delete operations.

Note: The Exclusions column indicates the number of excluded files. See Getting Information about Excluded Files.

5. Click Validate basket.

The file list in the basket clears.

The newly copied objects display in the destination platform appropriate directory.

To delete a copy request

1. Right-click the request that you want to delete, then click **Delete**.

A prompt asks you to confirm the copy request deletion.

2. Click Yes.

The copy operation is deleted.

The Miria User Interface on Unix enables you to copy any data located on a machine where the Miria agent is installed.

CHAPTER 7 - Monitoring Operations

This topic provides detailed information about all monitoring actions that you can take to control your operations.

Checking Operation Requests in the Basket

When you request an operation from the Miria User Interface, it does not take place until it is confirmed.

The basket can store these operation requests:

- Archiving
- Retrieval
- Copy
- Move
- Delete

By viewing information in the basket about the data to process, you can determine whether the requests are valid or must be canceled.

Getting Information on Data to be Archived

Once the directories and files have been selected for archiving, the archiving request to be validated opens in the basket.

At this stage, you can view the object properties, as well as details about the files that are excluded from archiving, if any.

To get information about the data to be archived

• In the basket, right-click an archiving request, and select Details of files.

The Archiving Details window opens.

This table describes the properties for each object selected:

Property	Description
File	Name of the file or directory to be archived.
Object Type	Type of object archived: • File • Directory • Symbolic Link
Last Modification	Date when the object was last modified.
Size	Size of the object.

Property	Description
Digest Type	Type of digest that is calculated at archiving time to verify whether the file content has changed since it was last archived.
	These are the valid values:
	 [None] MD5 SHA-1 SHA-256 SHA-384 SHA-512
Digest	Value of the above digest, if this was used.

Getting Information about Excluded Files

Miria can exclude some files from archiving for these reasons:

- **File types.** For example, if the administrator has specified that the PDF files must not be archived, all PDF files are excluded from archiving, even if you select them.
- **Stubs.** Stubs are not real data files but only pointers to files that have already been archived. Such files cannot be archived.
- Permission issues. At Operating System level, you may not have the necessary rights to archive a folder.

To get information about excluded files

Information about excluded files is available only if the Miria Administrator has configured archiving in Explicit mode (i.e., files in a directory are processed individually, and not as a whole).

- 1. Review the basket Exclusions column to determine whether there are files that are excluded from archiving.
- 2. If there are excluded files, right-click the archiving request, and select Details of excluded files.

The Exclusion Details window appears.

The Exclusion Details window displays the same information as for other files (access path, object type, last modification date, and size). In addition it also indicates the reason why the file is excluded in the Comment column.

Canceling Operation Requests

To cancel an operation stored in the basket

- 1. From the basket, right-click the operation you want to cancel, then click Delete. A prompt asks you to confirm the operation cancellation.
- 2. Click Yes.

The operation is canceled.

To cancel all the operations on an archive or platform

- From the basket, right-click the archive or platform, then click Delete.
 A prompt asks you to confirm the cancellation of all the operations related to this archive or platform.
- Click Yes.All the operations are canceled.

Alarms and Messages

Once an archiving or retrieval request has been validated, Miria User Interface issues a message to inform you about the operation result.

These are the two messages types that you can get:

• **Alarms.** If the job could not be completed, both the Alarms and the General messages lists display an alarm message.

The Title bar displays the current alarm number, next to the bell icon.

Note: Each time you connect to Miria User Interface, a pop-up indicates the alarm number and asks whether you want to view the alarm list.

• **Standard messages.** If the job is in progress or successfully completed, the General messages list displays a standard message.

Viewing Alarms and Messages

1. From the title bar, click **Alarms**.

The **Messages pane** opens.

The **Alarms** tab shows the alarm list for the current archive, or for all archives if no archive is selected.

The current archive name displays at the top of the window in the Messages *archive_name* form.

2. Click the **Messages** tab to display the current messages list (Figure 14).

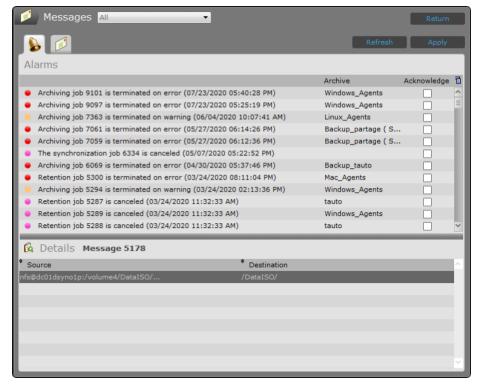


Figure 14: Colored bullet points indicate the status of a message

This table shows the possible statuses an operation can get:

Job Status	Description
Canceled	The administrator has refused the operation.
Completed	The operation was successfully completed.
Terminated on error	The operation terminated because of an error. Contact your administrator and quote the job number for reference.
Being created	The request has been validated and the corresponding job is being created.
Denied	The operation was denied. Contact your administrator and quote the job number for reference.
In queue	Miria is waiting for a prior operation to complete. If the status does not change, contact your administrator and quote the job number for reference.

Job Status	Description
Pending validation	The operation does not start until the project archive owner involved validates it. See Validating an Archiving Job
Running	The operation is in progress. The icon can display on the sub-job of a running retrieval job. This means that media needed to complete the retrieval are not in the library or otherwise unavailable. See Viewing the Media Requested by a Job for details.
Invalid	The license is invalid. Contact your administrator.

Note: To follow the operation evolution, click **Refresh** in the top right corner.

- 3. Selecting a message shows its details in the window lower part. The operation source and/or destination are displayed.
- 4. If you want to view messages about another archive, or all the messages, select it from the drop-down list at the top of the window Messages *archive name*.
- 5. Click **Return** at the top right corner to go back to the right-hand **Explorer**.

Deleting Alarms and Messages

You can free up the message list by deleting alarms and messages once you have reviewed them.

To delete alarms and messages

- From the title bar, click Alarms.
 The messages for the current archive displays.
- 2. In the **Acknowledge** column, select the check boxes in front of the messages to be deleted.
- 3. Click Apply.

The selected messages are deleted and will not be displayed again the next time you connect. You can not remove messages concerning operations in progress.

Validating an Archiving Job

The administrator may decide to validate all archiving jobs or require that the project archive owner validate them.

In these cases, an additional step is required to archive the files.

If you are the project archive owner, you may have to validate some archiving jobs that other users have launched.

To validate an archiving job

1. From the title bar, click Alarms.

The **Messages** pane opens.

The **Alarms** tab displays the alarm list for the current archive.

2. Click the **Messages** tab.

The list of all current validation messages for the selected archive displays.

3. Right-click a job with the *Pending Validation* status, then select **Validate job**. A message asks you to confirm the archiving of all the files included in the archiving operation.

- 4. Respond to the message as appropriate:
 - To validate all the files, click Yes.
 The archiving job proceeds.

Or

• To check the files that are going to be archived, and remove some of them from archiving, click No.

The **Archiving Job Details** window opens.

Note: If the job contains more than 5,000 objects, Miria can not display the object list, and you must validate the entire job.

5. Uncheck the files that you do not want to archive, then click **Validate**.

A message asks you to confirm the archiving.

6. Click Yes.

The archiving job runs as specified.

Validating a Retention Job

Archived data is stored for a specified length of time, or *retention period*. When the retention is over, expired archived data is deleted from storage, to free some storage space.

Archived files are recycled either because they have reached their retention period end, or when a preset level of volume occupancy is exceeded on the storage.

See the Miria Administrator's Documentation for details on retention.

In Miria, the actual recycling is controlled by a *retention job* (i.e., the job in charge of deleting the expired archived objects).

You can also manually delete archived data from the Miria User Interface. See Deleting Folders or Archived Files/Directories.

Retention jobs may be subject to validation. If so, the retention job displays in the messages as Retention jobxxxis pending validation.

If you are the archive owner involved or any other authorized user, you must manage the retention job.

These are the possible actions:

- Delete all of the expired files.
- Retain a selected set of expired files and delete the remaining files.

Note: If the job contains more than 5,000 objects, this feature is not available.

- Retain all expired files until the next maintenance job is run.
- Retain all expired files by extending their retention period.

To delete all the expired files from the archive

- 1. From the Miria User Interface title bar, click **Alarms**.
 - The **Alarms pane** opens.
 - All the messages issued for the current archive are displayed.
- 2. Right-click a Retention validation message of the *Retention job xxx is pending validation* form.
- 3. Choose Validate job.
 - The Validating retention job window opens.
- 4. Select **Apply the Retention** and click **Validate**.
- 5. Confirm the action.
 - The retention job starts and deletes all of the expired files.

To retain a selected set of expired files, and delete the remaining files

If the job contains more than 5,000 objects, this feature is not available.

1. From the title bar, click **Alarms**.

The **Alarms pane** opens.

All the messages issued for the current archive are displayed.

2. Right-click a Retention validation message of the *Retention job xxx is pending validation* form, and choose **Validate**.

The Validating retention job window opens.

3. Select View file list and click Validate.

The list of all expired files opens.

4. Clear the check boxes next to the files that you want to retain.

To clear many check boxes at once, highlight several files, then clear one of the boxes. To clear or select many files at once, highlight several files, then right-click them, and choose **Check** or **Uncheck**.

- 5. Depending on how long you want to retain the file, specify the New Retention:
- If you want to retain the file until the next maintenance job, keep the Validate later default value.
- If you want to extend the retention of the file, click in the **New Retention** column corresponding to the file, and select a new retention period from the list.
 - 6. Click Validate.
 - 7. Confirm the action.

The retention job starts.

To retain all expired files until the next maintenance job is run

1. From the title bar, click Alarms.

The **Alarms pane** opens.

All the messages issued for the current archive are displayed.

2. Right-click a Retention validation message of the *Retention job xxx is pending validation* form, and choose Validate job.

The Validating retention job window opens.

3. Select Validate later and click Validate.

The **Retention job** is denied and all the files are retained.

It will be run again the next time a maintenance task is performed on this archive.

To retain all expired files by extending their retention periods

1. From the title bar, click Alarms.

The Alarms pane opens.

All the messages issued for the current archive are displayed.

2. Right-click a Retention validation message of the *Retention job xxx is pending validation* form, and choose Validate job.

The Validating retention job windows opens.

3. Select **Apply a new Retention** and click **Validate**.

The list of the existing retention periods opens.

- 4. Select the new retention period to be applied to the expired files, and click Validate.
- 5. Confirm the action.

The new retention is applied to all the expired files in the archive.

The files are retained until the end of their new retention period.

Managing Media

When archiving data on a Media Manager storage manager, you may want to view the media list and perform actions on media.

Prerequisites

In order for you to manage media, the Miria administrator must grant you at least the View Media List permission in the Media advanced settings.

Then, for each action on media, the administrator must also enable the appropriate advanced settings for your user account:

- Eject a media.
- Close and reopen a media.
- Duplicate a media.
- Change the LTFS volume name.

See the Miria Administrator's Documentation for details on the Media settings.

Viewing the Media Lists

Viewing the General Media List

The Media List lists all the media and enables you to perform actions on media.

To open the global Media List:

• From the left pane, select the Gear wheel (Services) > Media List.

The Media List window displays in the pane to the right. You can sort all the window columns and move all of them, but the first column.

This table shows the available media parameters:

Parameter	Description
Tape icon	A small lock displays on the tape icon when the media is in use and locked by a job.
	The icon is red with a raised hand when the media is in prevent use mode (i.e., it cannot be mounted to archive or retrieve data).
Name	The name of the media.
Storage Manager	The storage manager on which the media is located.
Storage Manager Container	The storage manager container on which the media is located.
Media Rule	The media rule associated with the media. Valid values are None, By Archive, or Custom.
	For information on media rules, see the Miria Administrator's Documentation.

Parameter	Description
Status	Displays the media Status and the date when it has acquired that status (e.g., Open since 05/22/2012 10:36:02 A.M.). These are the statuses a media can have: New Open Closed Suspended Empty Closed (No Reopen)
Cause	Cause of the status given in the previous field. These are the possible causes: Full On Error Note: If media is Closed on Error, it must not be reopened until the incident cause has been identified and corrected. On write error On read error Prevent spanning On Check Integrity On discovery (e.g., media can be Closed because it is full or Closed On Error, etc.). By default, a media is New and there is no cause.
Format	These are the available formats: PAX LTFS tar (ATN) tina (ATN) cpio (ATN) sidf (ATN) In almost all cases, it is .pax. Customers who are migrating archives from Atempo Tina may see the other formats display in Media Manager storage managers, designating Tina media that have been detected in the storage manager.
Creation Date	Date the media was created.
Volume	Volume of the data already written on the media.

Parameter	Description
Remaining Volume	Volume of the unwritten space remaining on the media.
Block Size	Block size configured on the media.
Data Partition	LTFS only. Indicates the ID of the LTFS partition on which the data is located. It can be 0 or 1.
Last Tape File	PAX only. Number of the last tape file present on the media. A tape file is a file on media composed of all the objects written during the same archiving session. If the session spans over several media, there are as many tape files as media used for this session.
	If this value is empty, it means that the media has a Null value, most likely because it is new and has not yet been read or written. This is not the same thing as a 0 value, which means that the offset is at the beginning of the media.
Logical Position	PAX only. The Logical Position represents the offset from the beginning of the media, in terms of blocks, to the end of the data already written. It enables the drive head to be positioned on the tape by logical position if the drive supports this functionality.
Fingerprint	This field is the same as the Digest in Media Manager. It is written to the first block of a media when it is allocated to provide logical identification, and protect it against overwriting. For more information on Digests, see the Miria Administrator's Documentation.
Stream	This is a logical representation of a data stream, the same as the Stream Node in the List of Instances window. Each archiving written to the media increments this number by one.
LTFS Volume ID	LTFS only. UUID that uniquely identifies the LTFS volume.
LTFS Owner	LTFS only. Information about the product.
LTFS Volume Name	LTFS only. Name of the LTFS volume. This name corresponds to the root directory of the file system.
Library	Indicates the name of the library currently holding the media. This is empty if the media is not online.
Home Slot	Indicates the library slot in which the media is located.

Parameter	Description
Drive	Indicates the name of the drive in which the media is located. This information displays only for media located in a drive.
Media Group	Indicates the media group name of the media.
Media locked by job	Indicates the ID of the current job locking the media. When the media is in use, a small lock appears on the tape icon.
Media locked by sub-job	Indicates the ID of the current sub-job locking the media. When the media is in use, a small lock appears on the tape icon.
Comment	Optional comment describing the media.

Viewing the Media Associated with an Archiving Job

You can display a list of only the media that are associated with a given archiving job.

- 1. From the title bar, click **Alarms**. The **Alarms pane** appears.
- 2. In the **Alarms** or **Messages pane**, right-click an archiving job. Choose **Media** from the popup menu.
- A Media List window opens. This table describes the two columns of the Media List window:

Column Heading	Description
Number (Job/Sub- job)/Media Name	 This column shows a tree arrangement: The tree root displays the job and sub-job numbers separated by a slash, (e.g., 1044/1304). You can display only one job at a time (i.e., job multi-selection is not available); however, a single archiving job might have more than one sub-job, in which case there are several root nodes (i.e. 1044/1304, 1044/1305, etc). Below the job and sub-job are the names or barcodes of all the media that the sub-job used. If you double-click the media name or barcode, the general Media List
	window opens. See Viewing the General Media List.

Viewing the Media Requested by a Job

You can also display only the media that were used for a completed job, or those that are required to complete a pending job.

Alarms or messages on jobs using a physical library through Media Manager may display the warning icon ____ next to a sub-job. At the same time, a flashing red message appears in the Details titlebar: Message n(WARNING: Some media are offline and/or in prevent use or unavailable (used by another job)).

This means that the job cannot proceed because some of the media needed are either not in the library, in prevent use mode, or are currently in use by another process:

- **Offline.** If the media is not in the library, the administrator must find the missing media and put it online.
- **Prevent use.** If the administrator sets the media in prevent use mode, it cannot be mounted in a drive and used for archiving or retrieval operations. The administrator must allow media use again.
- **Unavailable.** If another job is currently using the media, it is automatically checked for availability every minute.

Once the media is both online and available, the job proceeds; when you click the Refresh button, the flashing message disappears.

To determine what media is offline or unavailable, right-click the alarm and select List of Requested Media from the pop-up menu. This table describes the columns of the Media List window:

Column Heading	Description
Number (Job/Sub- job)/Media Name	 This column shows a tree structure: The root of the tree displays the job and sub-job numbers separated by a slash (e.g., 1044/1304). You can display only one job at a time (multiple selection of jobs is not available); however, a single retrieval
	 job might have more than one sub-job, in which case there are several root nodes (i.e., 1044/1304, 1044/1305, etc). Below the job and sub-job are the names or barcodes of all the media that the sub-job used. Note: If you double-click the Media Name or barcode, the general Media List window is displayed. See Viewing the General Media List.
Storage Manager	The name of the storage manager used for the sub-job and containing the media.
Format	For Media Manager, this can only be pax or LTFS.
Online	Read-only check box that indicates whether the requested media is currently online.
Available	Read-only check box that indicates whether the requested media is currently available.

Column Heading	Description
Prevent Use	Read-only check box that indicates whether the requested media is currently in prevent use mode.

When retrieving data from duplicated media, the offline media warning displays if at least one of the media involved is offline. Even if one of the media is available and the job completes successfully, the offline media warning displays, and the list of requested media displays the name of offline media. If the retrieval job completes successfully, take no notice of this warning.

Performing Actions on Media

From the Media List, you can eject, scratch, recycle, close, reopen, or duplicate media. You can also change the volume name of an LTFS media.

Other actions, such as exporting media contents, are only available through the command line interface. For more information, see the Miria Administrator's Documentation.

Requesting Media Ejection

Ejecting a media enables you to remove it physically from the library. Once a media has been ejected, it becomes offline.

To request media ejection

- 1. From the left pane, click the Gear wheel (Services) tab. The Media List window displays in the right pane.
- 2. Select one or several media in the list, and click Request Ejection.

Depending on the configuration, the media is automatically ejected from the library, or requires the media administrator's manual intervention.

Changing the Volume Name of an LTFS Media

You can modify the volume name of an LTFS media at any time. This name corresponds to the root directory of the LTFS media file system. Changing this name does not impact the media barcode which remains unchanged.

To change the volume name of an LTFS media

- 1. From the left pane, click the Gear wheel (Services) tab. The **Media List** window displays in the right pane.
- 2. Select one or several media in the list, and click LTFS Volume.
 - The **Change LTFS volume name** window opens.
- 3. In the **New LTFS Volume Name** field, enter the new volume name for the LTFS media. These characters are forbidden in the volume name: /: " * ? < > \ |.
- 4. Click Validate.

The media volume name is modified.

Scratching Media

Scratching a Media Manager media allows you to remove it from the Miria database, and deletes its fingerprint.

1. From the left pane, click the **Gear wheel (Services)** tab.

The **Media List** window displays in the right pane.

2. Select one or several media in the list, and click Scratch.

The Scratch media window opens.

- If you want to allow the scratching of duplicated media only, from the **Options** area, select the
 Prevent Media Loss check mark. Enabling this option prevents you from loosing data that has
 not been previously duplicated.
- 4. Click Validate.

The media is removed from the Media List.

Recycling Media

Recycling a media allows you to empty it, so that you can reuse it.

1. From the left pane, click the **Gear wheel (Services)** tab.

The **Media List** window displays in the right pane.

2. Select one or several media in the list, and **click** Recycle.

The **Recycle media** window opens.

- If you want to allow the recycling of duplicated media only, from the Options area, select the
 Prevent Media Loss check mark. Enabling this option prevents you from loosing data that has
 not been previously duplicated.
- 4. Click Validate.

The media Status switches to Empty.

Closing Media

Closing a media enables you to prevent Miria from requesting it again for archiving. Subsequent archivings are performed on new media. A closed media can nevertheless be requested for retrieval.

1. From the left pane, click the **Gear wheel (Services)** tab.

The **Media List** window displays in the right pane.

2. Select one or several media in the list, and click Close.

The media is closed and its status is updated in the **Status** column.

Reopening Media

Reopening a closed media makes it available again for archiving. A media with status Closed (No reopen) cannot be reopened.

1. From the left pane, click the **Gear wheel (Services)** tab.

The **Media List** window displays in the right pane.

2. Select one or several media in the list, and click Reopen.

The media is reopened and its status is updated in the Status column.

Duplicating Media

If you want to copy the whole content of a media to another media, use the duplication feature.

The duplication feature is available under these conditions:

- At least two drives and a scratch media are available.
- The media is a Media Manager media in TAR format.
- The destination storage manager is the same as the source storage manager.

The source and destination media remain available for subsequent operations, and are independent of one another. If new data is archived on the source media, the contents of the source and destination media are no longer the same.

If you want both media to remain strictly identical, you must close them.

See Closing Media for details.

To duplicate a media:

- 1. From the left pane, click the **Gear wheel (Services)** tab. The **Media List** window displays in the right pane.
- 2. Select one or several media in the list. The selected media must belong to the same storage manager.
- 3. Click **Duplicate**. The Duplicate the media window opens.
- 4. From the **Destination** field, **click** Browse to choose the storage manager container on which the media will be duplicated.

Note: Only the storage manager containers belonging to the same storage manager as the source media are available from the list.

- 5. If necessary, set these options:
- **Platform Name.** Name of the Miria platform that reads the source media and performs the duplication.
 - This option is typically used when the platform associated with the destination storage manager is a platform pool.
- **Parallelism Index.** If you selected several media to duplicate, you can specify the number of duplications that you want to be run simultaneously.
- **Best Fit.** If you select several media to duplicate, you can choose to fit several source media to only one destination media.

For instance, with the Best Fit option enabled, if you duplicate media A (400 GB), media B (700 GB), and media C (250 GB) to a 1,200 GB destination media, the data will fit on two destination media (i.e., A and B fit on the first destination media, and media C on the second one).

In this example, if the Best Fit option is disabled, there will be three destination media, one for each source media.

Note: For the parallelization to be effective, there must be enough drives available. For instance, if you select ten media to duplicate, and a parallelism index of 3, there must be at least six drives for the parallelization to be optimized. If there are less drives available, some of the duplication sub-jobs run sequentially.

6. Click Validate.

A new media with the Open status displays in the Media List.

Viewing Volume Report

Miria User Interface provides information on the volume that archived objects (i.e., directories, folders, or files, etc.) occupy in the storage.

The Volume Report window displays volume information on each archive, as well as the global volume occupied by the data to which you are allowed to access.

To open the global Volume Report

• From the left pane, select the gear wheel (Services) > Volume Report.

The **Volume Report** window displays in the pane to the right.

This table describes the **Volume Report** window columns and buttons:

Parameter	Description
Column.	
Archive Name	List of all the archives to which you are allowed to access.
Nb Files	Number of files archived in this archive.
Nb Directories	Number of directories archived in this archive.
Nb Folders	Number of archive folders present in this archive.
Nb Links	Number of shared assets links archived in this archive (e.g., such links are generated when the archiving of two video edition projects results in the archiving of an asset shared by both projects.)

Parameter	Description
Volume	Volume of all the objects archived in this archive, including all the object instances.
	The unit changes depending on the volume. It can be bytes, KB, MB, or GB.
	In case of multiple writing on several storage managers, when computing the volume, Miria takes into account only the volume archived and not the volume actually stored.
Total line	Displays the total number of objects (i.e., files, folders, directories, and links) contained in the Miria instance, as well as the global volume occupied by the archives to which you are allowed to access.
Buttons.	
Fold All	Displays only the archive list first level.
Expand All	Displays all the archive list levels.
Refresh	Updates the volume information.
Return	Takes you back to the Browse tab.