# ANTARES 6.x

# DATA ORGANIZER 1.0

# REFERENCE GUIDE

| | |
|---|---|
| *Simulation    package* | |
| *Script Editor package* | |
| *Graph Editor package* | |
| *Data Organizer package* | *X* |

# DATA ORGANIZER

# REFERENCE GUIDE

### *Table of contents*

## 1 Introduction

The purpose of this document is to detail the operations that can be carried out with the *Antares data organizer* application, which may be installed as a companion tool to the *Antares simulator*. This document does not address issues related to the use of the *Antares simulator*. The reader is assumed to be familiar with the concepts developed in the *Antares simulator*, to which an introduction can be found in the document named "Antares General Reference Guide".

Antares studies often involve a great number of files and may require a lot of space for storage and a lot of time during copy/transfer operations. Besides, complex study process may require many simulations on multiple datasets variants. The need can then arise to categorize these datasets in different manners (e.g. simulations related to such time horizon or to such technical strategy, etc.).

In this context, the purpose of the *data organizer* is, by providing a flexible environment dedicated to the organization of the application data, to help users to classify and keep track of the work completed on an everyday basis, while saving time and disk resources on the long run.

The *Antares data organizer* is built around the following concepts:

- Antares study:  folder containing data used and/or produced by the *Antares simulator*
- Antares study catalog: file containing references (storage paths) to Antares studies
- Antares archive: file containing a compressed view of an Antares study
- Antares archive catalog: file containing references (storage paths) to Antares archives
- Antares portfolio:  a folder containing Antares studies and/or Antares archives
- Antares directory: a folder containing Antares catalogs

The application provides different services listed hereafter:

- Conversion of Antares studies into Antares archives, back and forth
- Trimming of Antares studies (removal of all redundant output and log files)
- Edition of Antares study  digest reports
- Registration/unregistration  of Antares studies in/from Antares studies catalogs
- Registration/unregistration  of Antares archives in/from Antares archives catalogs
- Copy of Antares studies and Antares archives into Antares portfolios
- Copy of Antares studies catalogs and Antares archives catalogs into Antares directories
- Concatenation of Antares catalogs within an Antares directory

These services are provided by three independent modules/panels whose content is further detailed in the next sections:

- Data manager (Management of Antares Studies and Archives within Antares portfolios)
- Catalog manager (Management of catalogs within Antares directories)
- Data browser (Outlook of a single specific Antares study or archive)

> **Note:** In this software, hovering the mouse over a function button or an input field displays help about the function or about the expected field content.

> **Note:** Paths too long to be displayed within the application standard layout are shortened and terminate by "…" Hovering the mouse over the pathname displays the complete path.

## 2 Data manager

A data manager session involves three steps carried out through the GUI and described hereafter.

### 2.1 Choice of origin and destination workspaces

This may be done either by using commands "origin" and "destination" of the main data organizer menu or within the data manager panel itself.

- The "origin" workspace to be used by the data manager for the current session is either a portfolio (containing studies and/or archives) or a catalog (containing references to studies or to archives) on which the user wishes to perform a number of actions.

  > **Note:** The selection of an origin workspace is mandatory. After selection, the list of archives and/or studies that are stored (portfolio) or referenced (catalog) within it is displayed

- The "destination" workspace contains one mandatory element and two optional elements. The mandatory element is the location at which new data generated by actions listed in 2.2 should be stored. Setting up this location requires to choose between two possibilities:
  - Unstructured: selection of a portfolio within which the results of all data-generating actions will be stored in a "flat" way (i.e. at the root of the portfolio)
  - Structured: for each item to process, use of the parent folder containing the native item to store the results of the action(s) scheduled for this item.
- In addition to the destination location, the destination workspace may optionally include two catalogs (one study catalog and/or one archive catalog)

Once these choices have been made, the list of the items found in the origin workspace is displayed and the second step of the session may be performed.

> **Note:** The structure of the origin portfolio should not exceed a depth of ten levels. Items stored deeper than that will not appear in the exploration result list.

### 2.2 Choice of actions to perform

For each item displayed in line (archive or study), three information fields and eight checkboxes are shown in columns. The three Information fields stand as follows:

- Item size (space on disk used for the storage of the study or of the archive))
- Date of last item modification (for a study : last modification through the simulator GUI; for an archive: date of creation of the archive file)
- Status ("archive" or "study" if the origin workspace is a portfolio ; "OK", "not found" or "corrupted" if the origin workspace is a catalog)

The eight checkboxes stand as follows:

- Show (S): produces in a general report (stored in the "log" folder) a section presenting the general metrics of the current item The content of this section is the same as that shown item-wise by the data browser (see section 4)
- Register (R): adds a new reference to the current item in the ad hoc destination catalog
- Unregister (U): removes the reference to the current item from the ad hoc origin catalog
- Trim (T): removes all output files and log files from the current study (not available for archives)
- Copy ( C): copies the current study folder or archive file to the destination portfolio (if different from the origin workspace)
- Archive (A): Compresses the current study folder as a file named "study_folder_name.antar"
- Expand (E): Decompress the current archive file in a study folder bearing its original name
- Delete (D): deletes the current study or archive from the origin portfolio.

**Note:** Depending on the nature of the item shown in line and on the nature of the destination workspace(s), each checkbox can either be ticked or must remain blank. For instance, studies can be compressed as archives, but archives cannot be compressed again. Likewise, it is not possible to register a study in a catalog if no catalog has been selected, etc.

**Note:** The name given to an archive is that of the Antares study folder it comes from (also called "external name"). This name is often identical to that of the proper Antares study name (also called "internal name"), but it may differ from it.

**Note:** The **Delete** command actually removes the dataset (archive or study) selected in the origin workspace (portfolio or catalog). It should not be confused with the Unregister (U) command, which only removes from an origin catalog the reference to an external dataset, without alteration of the dataset itself.

**Note:** The new items produced by the **Archive, Expand** and **Copy** commands are stored in the destination portfolio.

**Note:** The new items produced by the **Archive, Expand** and **Copy** commands are automatically registered in the archives and/or studies catalogs that may have been selected on the destination side. These destination catalogs should not be selected if registration is undesirable.

### *2.3 Choice of the moment when the actions should be performed*

Once the desired set of actions to perform on the items of the origin workspace has been defined by ticking the appropriate checkboxes, these can be either performed on the spot or planned for a later execution, by defining an ad hoc delay in the bottom left field of the data manager panel.

When several checkboxes are ticked on the same line, they are performed from left to right.

**Note:** a planned operation may be canceled at any moment by using the ad hoc button

**Note:** the countdown is not affected by the Windows session entering locked state

**Note:** the countdown is stopped by the Windows session entering sleeping mode

## 3 Catalog manager

A catalog manager session involves a sequence of steps carried out through the GUI and described hereafter. To the exception of the very first of them, they are all optional.

### 3.1 Choice of source and sink workspaces

This may be done either by using commands "source" and "sink" of the main data organizer menu or within the catalog manager panel itself:

- The "source" workspace to be used by the catalog manager for the current session is a directory (containing studies catalogs and/or archives catalogs).
- The "sink" workspace to be used by the catalog manager for the current session is a directory (containing studies catalogs and/or archives catalogs).

Once the source and/or the sink have been chosen, the lists of catalogs found in both source workspace (left side) and sink workspace (right side) are displayed in the catalog manager panel and any[1] of the steps described further in 3.2, 3.3 or 3.4 may be performed.

### 3.2 Creation and suppression of catalogs

New catalogs may be created in either source or sink workspaces by carrying out the following sequence:

- Typing of a character string forming a valid file name[2] (without the specific catalog extension)
- Using either the "New Archives Catalog" button or the "New Studies Catalog" button of the appropriate side of the panel

Existing catalogs may be deleted in either source or sink workspaces by carrying out the following sequence:

- Ticking the checkbox(es) associated with the catalog(s) to delete
- Using the "Delete" button of the appropriate side of the panel

### 3.3 Duplication of catalogs

Catalogs may be copied either way (from source to sink or from sink to source) by carrying out successively the following operations:

- Ticking the checkbox(es) associated with the catalog(s) to copy
- Using either of the "Left-to-Right" or the "Right-to-Left" arrow-shaped buttons located in the middle of the panel

### 3.4 Concatenation of catalogs

The content of a set of catalogs selected in the source workspace can be appended to catalogs selected in the sink workspace by carrying out successively the following operations:

- On the source side, ticking the checkbox(es) associated with the catalog(s) whose content should be transferred
- On the sink side, ticking the checkboxes associated with the catalog(s) to which the transferred content should be appended
- Using the cross-shaped button located in the middle of the panel

> **Note:** The content of a catalog cannot be appended to a catalog of a different type (i.e. archives catalogs cannot be appended to studies catalogs and studies catalogs cannot be appended to archives catalogs).

> **Note:** When the content of catalog A is appended to catalog B, references found in A that may already exist in B are not duplicated. Only missing references are copied.

---

[1] If the source or the sink is not defined, only the (one-side) 3.2 command can be performed
[2] Symbols for valid names are:  a-z , A-Z , 0-9,  - , _ , ( , ) , & , space, comma , @

## 4 Data browser

The Data Browser panel has no interactive GUI element. Its sole purpose is to display in a way easy to read a number of characteristics related to a specific Antares Study or a specific Antares archive selected beforehand in the Data manager panel. This selection is carried out by clicking on the relevant item in the Data Manager list (see section 2). As a result, the following information is displayed in the Data Browser panel.

### 4.1 Study: identification and metrics

- Study External name (i.e. name of the folder containing the Antares study)
- Study Internal name (i.e. Antares study name)
- Study storage location
- Original Study Hash (information printed in the "show" file but not displayed in the browser window)[3]
- Version (Antares format of the Antares study)
- Last saved (first archive creation date; subsequent copies of the item will still refer to this date)
- Size and file number of the "Input" data folder
- Size and file number of the "Output" data folder
- Size and file number of the "User" data folder
- Total size and file number of the Antares study

### 4.2 Archive: Identification and metrics

- Archive file name
- Original Study location
- Original Study catalog (if any : catalog used to find the study when the archive was created)
- Study External name (i.e. name of the folder containing the Antares study)
- Study Internal name (i.e. Antares study name)
- Archive storage location
- Original Study Hash (digital signature of the study)
- Version (Antares format of the Antares study)
- Last saved (first archive creation date; subsequent copies of the item will still refer to this date)
- Size of the archive file
- Size and number of files of the uncompressed original study

### 4.3 Study and Archive : Antares notepad

This field displays the all-purpose information stored in the "user's notes" notepad that users may have filled out when building the dataset with the Antares simulator

> **Note:** The content of this study-related notepad cannot be modified by the Data browser. Since it is a proper part of the study dataset, it can be edited only with the ***Antares simulator***

---

[3] Computing the study digital signature may require a long time, hence the information is not delivered when using the interactive data browser. It can, however, be accessed by using the "show" command.