



Application Note #11

How to perform : «SIS file optimization»

The application-note purpose is to guide the user in performing the SIS file structure optimization (Defragmentation).

All the redundancies and the unused spaces are removed and the SIS file compacted and packed. This task allows to reduce the file overall size.

The defragmentation is strongly suggested after any editing task of the Image-Set, Channels, Planes or Time points.

It is also useful when the stitching, the volume fusion or additional dataset import are done. Check the file status always before transferring it to the permanent storage unit or before sharing it by upload to any transfer services.

Application Note «SIS file optimization»

Application Flowchart

Open the working dataset

Check the file status

Apply the defragment task

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- 3. Apply the defragment task



Application Note «SIS file optimization»

1. Open the SIS file

Step 1.1

Select the **Open..** item from the file menu.

Step 2.2

Select the SIS file from the browser.

✓ 4D Viewer 1 - arivis Vision4D 3.2.0 File Edit View Data Navigation New Viewer ▶ ✓ Open... CTRL+O Øpen from arivis Image Hub... Pile Browser... Open Recent ▶ ✓ Export... Import... Import...

TIPS :

The dataset is visualized according to the current rendering setting parameters. Please refer to the (*Reference manual* – *Chapter xx)* for further details.



DETAILS:

The dataset is a multi dimensional, discrete, representation of your real sample volume. It can be structured as a Z series of planes (Optical sectioning) of multiple channels (dyes) in a temporal sequence of time points (located in several spatial positions).

Usually the dataset shows a single experimental situation (a complete experiment can be composed by several datasets). The datasets are available as graphic files saved in plenty of file formats (standard formats as well as proprietary formats)



2. Check the file status

Step 2.1

From the Data menu, select the "Defragment File ... " item



NOTE :

If the SIS file doesn't require any optimization, this message is issued. Press OK to exit from the function.





3. Apply the defragment task.

Step 3.1

If the SIS file needs to be optimized, Vision4D will ask to select the defragmentation method.

- **Fast Defragmentation** • It performs a fast, but less efficient, task.
- **Full Defragmentation** •

A complete optimization is applied. It takes more time. (Suggested)

👍 Clean-up File	\times
The file contains 40 % unused space.	
Fast Defragmentation This mode will reduce the file size by approximately 2 GB.	
Full Defragmentation This mode will reduce the file size by approximately 2 GB. Depending on the internal structure and the file size it may take a very long time.	
1 The file will be saved. You will not be able to undo any changes.	_
Cancel	

NOTE : Wait until the defragmentation is completed.









Contact the arivis application support to receive additional technical details about the topic described in the application note, or how to adapt the application workflow to your requirements.

"The quantitative analysis of the images represents the art of transforming a visual sensation into its schematic and discrete form allowing its univocal description, classification and mathematical and logical interpretation of its spatial and temporal components"

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