

DIVA3D StreamIO

Version 4.1.3

Installation

The StreamIO module is the “heart” of all operations taking action inside DIVA3D . It is this module that manages all the video stream buffers and all the input/output modules. When the user loads a video using an I/O module, StreamIO module creates a video stream buffer and establishes an association between a video buffer and the video.

To install the StreamIO module the user has to copy the streamio.dll in DIVA3D’s working directory. After installing the Video Buffer Management entry is added under the Modules menu.

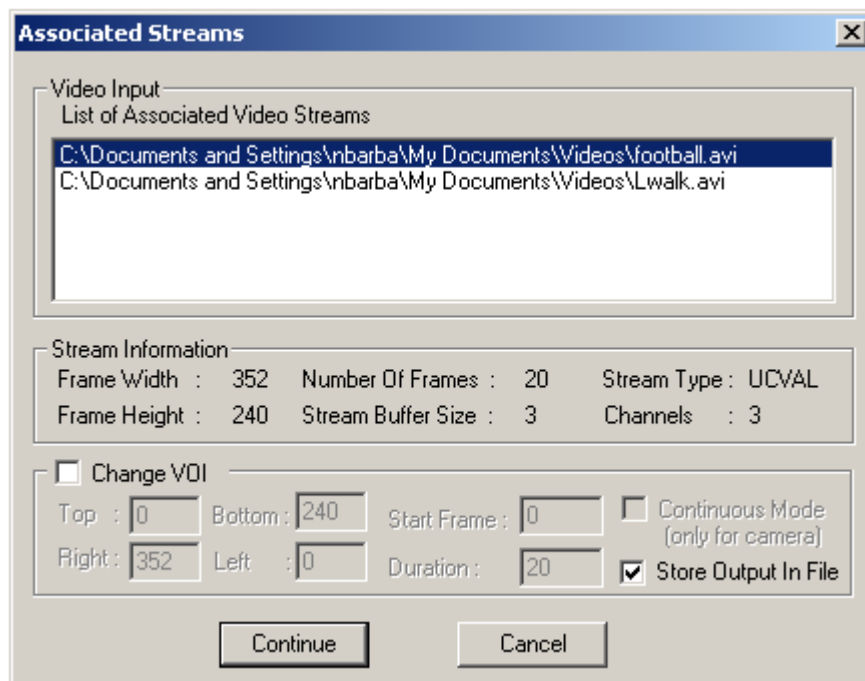
Dependencies

This module needs player.dll to exist in DIVA3D’s working directory in order to work properly.

Usage

The Video Buffer Management entry, which is added after streamio.dll installation, provides the following three options:

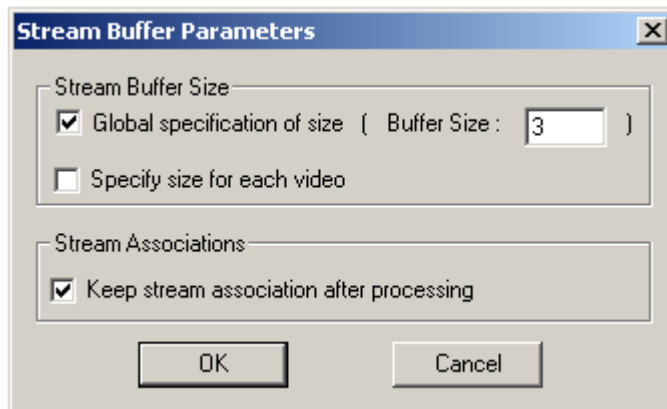
- **State of Video Streams** : Displays a dialog box where the user can see or set the parameters the input video buffers.



This dialog box has a list of all the files that are associated with a video buffer. By selecting one video buffer all the fields are automatically filled with information regarding this volume. By double clicking on the selection the elected video is viewed on a new player window. In the information’s

fields there is a selection if we want to use an output file or not, information about the video (frames , size) and VOI information. The VOI (Volume Of Interest) part is activated by ticking the Change VOI option and indicates the processing limits of the buffer. There we define :

- The rectangle inside the video which we want to process
 - The Starting frame of the process and for how many frames we want a process to be applied to the video. (Note : When defining the process limits in the DIVA 3D media player , these two fields are updated automatically.
 - In case we select to process from “USB Camera Real Time Input” we can choose the continuous mode. By doing so , the processing of the input will continue until the user aborts it or the hard disk of the system is full.
- **Release Video Stream** : Displays the dialog box described above but this time when selecting a buffer and pressing OK the association between the video and the video buffer is destroyed. This is the proper way of unloading movies from DIVA3D.
 - **Stream Parameters** : When the user loads a video file in DIVA3D an association is created between the video and a video stream buffer. The size of the video buffer is defined in the Define Parameters option.



The buffer size specified here affects all the input/output modules that are installed in DIVA3D (e.g. camera module , aviio module). There are two options :

- **Global specification of size:** Specify a size for the buffer and all the video buffers will be created with this specified size.
- **Specify size for each video:** By selecting this option the user will be prompted a dialog box ,each time a video is associated with a video buffer, to specify the size of the video buffer.

Also there is an option to indicate if the user wants to keep the association with the output file after the process or loose it.

Note that these values are stored in the registry so the user will not have to insert them each time DIVA3D is opened.