zView installation



Introduction

With zView, you can share the zSpace experience with others. Normally, only the person at the zSpace display can see the application in stereoscopic 3D. While your zSpace system may include non-tracked eyewear for observers, the display is based on the user's head position. With zView you can share the experience with a large audience, without additional eyewear. zView projects the user's session onto a second display, such as a projection screen or a second monitor. You can use zView to display the application in real time or record the zSpace session for later sharing.

Overview

In this manual, after doing zSpace 200 installation you will learn how to share zSpace experience due to zView. This experience has been developed and certified by the iV Lab at Dassault Systèmes. For any feedback, please contact this document's writer.

Experience Description

zView provides an Augmented Reality experience :

Augmented Reality View shows the application from a fixed viewpoint, without head tracking. This mode requires a camera. Everything in the camera's frame, including the user, is shown.



Augmented Reality View

zView Requirements

- zSpace 100 or 200 previously installed
- zView software provided by Dassault Systemes
- A second display for the zView application window
- A webcam that supports HD resolutions (1080x720 or 1920x1080)

We have tested zView with Logitech C920 webcam.

- A zSpace camera mount or a tripod
- 3DVia Studio Pro XHD license installed

zView Setup

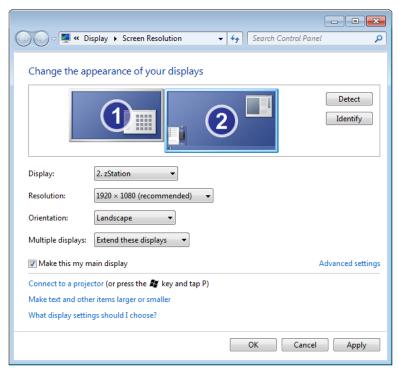
Connecting to a Second Display

You can connect your PC to a second monitor, a projection screen, or a TV. Use a DVI, HDMI, VGA, or DisplayPort connection as required by the second display.

- 1. In the Windows Control Panel, select Display.
- 2. Choose Adjust Resolution.
- **3.** Check that the Control Panel shows the two displays in the same left-to-right order as your displays are physically placed. For example, in the window below, the zSpace display is to the right of the other display.

If the displays are not arranged correctly, click and drag on the window marked (1) or (2) in the Control Panel.

- **4.** Choose Extend these displays.
- **5.** Make sure the zSpace display is your main display, as shown below.



Screen Resolution

6. Click on Apply.

For more information, go to https://support.zspace.com and search for the article on Managing Multiple Displays.

Setting up the Camera

Before you set up the camera, position the camera mount. This can be the zSpace camera mount, which attaches to the zSpace display, or it can be your own tripod. Next, plug the camera into your PC and install the Webcam software.

Placing the Tripod

Set the camera on the tripod so that the entire zSpace display screen is visible to the camera. Adjust the tripod so that you capture as much or as little of the user as you want.

Plugging in the Webcam

Plug the webcam's USB cable into your PC. Refer to the next section for instructions on adjusting the webcam's placement.

Note: On many PCs, the webcam functions best in a USB 2.0 port instead of a USB 3.0 port. If you need help identifying your USB ports, go to https://support.zspace.com and search the knowledge base for an article on USB 3.0 ports.

Installing Logitech webcam software

- 1. Go to http://support.logitech.fr/fr fr/downloads and dowload Logitech Webcam Software.
- 2. Install it

Configuring zView

- 1. Contact <u>dscampus.education@3ds.com</u> with « zView installation » as email object. You will receive a zip file named 3DViewCalibrationTool_PointAndClick.zip
- 2. Unzip the file 3DViewCalibrationTool_PointAndClick.zip provided by Dassault Systemes
- 3. Watch the video HowTo_Click_and_Point_11-2014.mp4, it will show you how to calibrate zView
- 4. As shown the video, Launch the batch file run.bat located in the directory 3DViewCalibrationTool PointAndClick
- 5. Calibrate the zView

Installing 3DVia Studio Pro XHD (not nodelock license)

- 1. Buy 3DVia Studio Pro XHD
- 2. Execute SetupDSLSmsi (Application). If there is a message which told you that a previous license server is already installed, you have uninstall DS Licence Server (in the control Panel) and relaunch SetupDSLSmsi.
- 3. To install and configurate DS license server follow the PDF file named DSLS.
- 4. Send a mail to <u>dscampus.education@3ds.com</u> with « Target ID 3DVia Studio Pro » as email object. You have to provide your computer Target ID in the email.
- 5. You will receive an email with the license keys and a .LIC file attached.
- 6. Connect to a network.
- 7. Open License server Administration
- 8. Double click on the status
- 9. Click on OK → The status is in Blue

- 10. Click on Enroll Licenses
- 11. Search and Select the .LIC file
- 12. Click on OK
- 13. Restart the computer

Launching zSpace with zView

- 1. Log on the computer
- 2. Close the vrpn server (command window which is automatically opened at the computer startup)
- 3. Launch Webcam software
- 4. Click on Capture Rapide
- 5. Close the Webcam software
- 6. Check if you are connected to the server:
 - o Double click on License Server administration
 - Double click on the icon under the status
 - o Click on OK
 - The icon is now blue (you are connected)
- 7. Close the License server Administration
- 8. Launch zSpace with zView due to the zSpaceComposerExperience_3DView application located in the directory C:\zSpaceComposerExperience\management -> zSpace is launching with zView but the pen does not work.
- Keep the zSpace active, Double Click on vrpn_server application located in the directory
 C:\zSpaceComposerExperience\redist\InfiniteZ\bin\zSpaceVRPNServer\1.2.0.17886 → the pen is OK



3Dview display on the second display