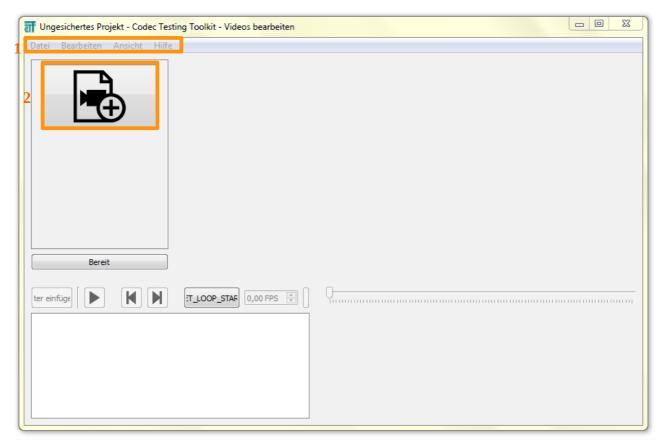
Using CTT

<u>Introduction</u>

This guide will help you navigate CTT for Windows desktop so that, when you're ready, you can change test videos to your needs and utilize them for analysing video codecs, using a variety of analysing tools provided by CTT.

To open CTT, double-click the CTT icon on your desktop (or choose it from the Windows **Start** menu). You'll see the window below:



- 1. **Menu bar** Includes all the options that will help you get the most out of CTT. You can save and load projects, undo and redo your actions and change between the three view types.
- 2. **Add Video Button** Starts the dialog to add a video to the project.

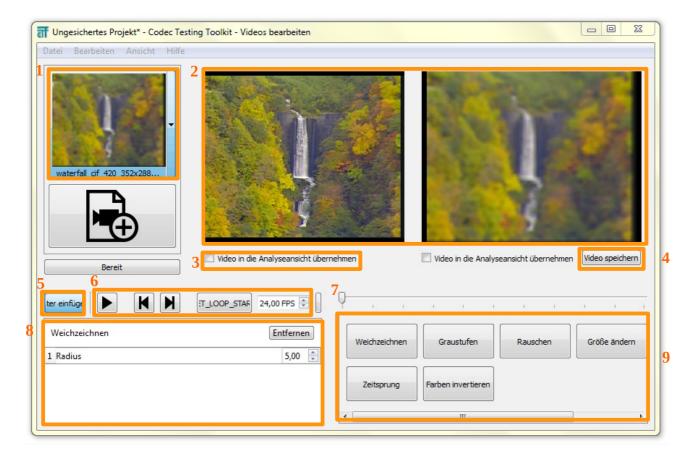
The window above is showing one out of the three views provided by CTT, the Editing View. To start working on a project, you can begin with adding videos, or load an existing project from a CTT file, using the Menu Bar.

CTT provides three particular Views with different purposes and functions. You can change to another view using the Menu Bar or the Shortcuts Str+1, 2 or 3.

- 1. **Editing View** For changing and creating whole sets of test videos.
- 2. **Analysing View** For comparing and analysing sets of test videos.
- 3. **ABX Tests** To find out whether there is a perceptible difference between two videos.

1. Editing View

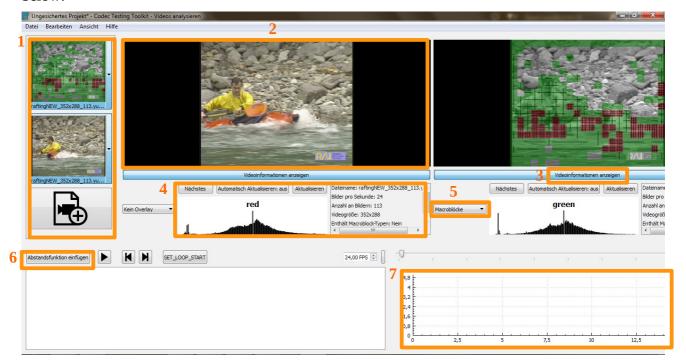
When you have navigated to the Editing View and have already added a video, you will see a window similar to the one below:



- 1. List of active videos, each represented by a thumbnail. They can be selected by clicking and also deleted by clicking on the small arrow on the side.
- 2. The active video, in its original form on the left and after applying filters on the right.
- 3. With this checkbox you can directly select videos for the Analysing View.
- 4. Use this button to save the active, filtered video to your hard disk.
- 5. This button opens the selection of filters on the right.
- 6. Use this toolbar to navigate in the videos represented above you can play them simultaneously with a specific framerate or navigate frame by frame using next- and previous-buttons.
- 7. This is the timeline. You may use it to jump to any frame of the videos above.
- 8. This is the list of filters you have used on the active video. You can change parameters of those filters and remove them.
- 9. Here you can see a variety of filters ready to be applied to the active video. They will also appear in the filter list to the left, so that you can further customize them.

2. Analysing View

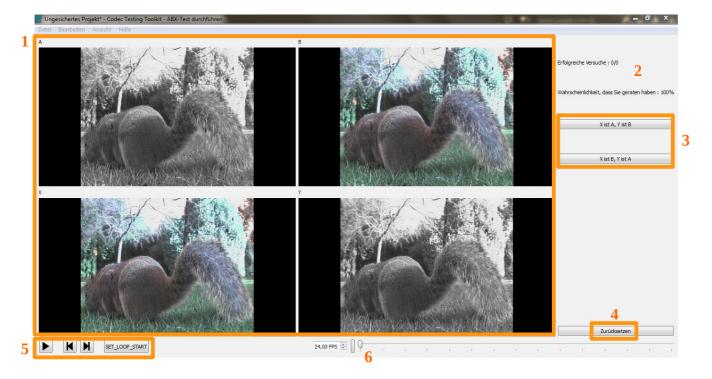
Assuming you have selected a few videos for this view you will see a window similar to the one below:



- 1. Adding, selecting and removing videos works just as in the Editing View. You can also select up to nine videos simultaneously.
- 2. Here the video is displayed. Up to nine videos can be displayed parallely.
- 3. With this button you can hide and unhide all the videometadata shown below.
- 4. This is the metadata of the video above. You can choose between different histograms, like luminance, blue and red. On the right side the general metadata of the video is displayed.
- 5. This button is for choosing Overlays. In this example a Macroblock-Overlay is selected, and you can clearly see the displayed macroblocks in the video above.
- 6. Use this button for adding difference functions. It works just like it does in the Editing View.
- 7. This is a graph multiple difference functions can be displayed, clearly distinguished with different colours.

3. ABX Tests

When you open the ABX Test View, you are asked to choose two videos to be compared – you can also add videos specifically for ABX Testing. After choosing two different videos you will see a window like this:



- 1. Here you can see and compare the four videos you have to decide whether A is X and B is Y or whether it is the other way around.
- 2. This is where your result is displayed. You can see how many times you have made a right or wrong decision, and how likely it is that you could have had the same result with guessing.
- 3. Use this buttons to decide which video is which.
- 4. Use this button to start with this ABX Test anew.
- 5. You can navigate within these four videos simultaneously using this toolbar with play button, framewise next and previous, just like in the other Views.
- 6. This is a timeline, used to jump to specific frames within the videos.