

The Observer XT supports playback of most commonly used video file formats, such as various MPEG and AVI formats, DivX and WMV. It is also possible to feed a live video signal into The Observer, through a FireWire or USB connection, and create up to 2 video files (DV-AVI or WMV) in The Observer while carrying out an observation. Depending on the power of your computer, you could create additional video files with an MPEG encoder that can be started/stopped from within The Observer. With our Screen Capture Module you can capture the screen of a test PC in a high-quality video file. This is a well-known need of usability professionals.

The Observer XT is a versatile solution that can be used in a stationary setup, with a desktop computer with one or two cameras connected, in which the observational data and video files are automatically synchronized. However, you also have the option to go into the field with one or more cameras and record your data in video files. When you return to the lab, you can log behavior from these video files in The Observer and easily synchronize the different video files and your event log files.

Support for DivX

DivX is a specific codec (short for compressor/decompressor) for MPEG-4. The DivX codec can compress video files, such as DV-AVI files, to a convenient size without noticeably losing quality and play those videos back on almost any computer. Other advantages of using the DivX codec is that it does not require special hardware or a high CPU-load of your computer.

With DivX hardware, such as a portable harddisk-recorder, you can record DivX files in the field or in your lab. The Observer XT supports the play back of DivX video files. This allows you to log events from

high quality videos without having to manage bulky video files that use up a lot of disk space.

You can use other freely available codecs to convert the large video files created in The Observer into different formats. You should, however, bear in mind that formats differ, for example, in their level of compression, resolution and possible playback speeds.

The use of multiple video files

Suppose you want to record the interaction between four people in a meeting and at the same time observe the behavior and facial expressions of the individual participants in detail. This is useful if you not only want to get a good overview of how the participants respond to each other but also, based on the individuals' behavior and facial expressions, of the underlying emotions. In your setup you would use three cameras: one that films the group as a whole and two others that film two persons each from closer by. Two of these video signals can be displayed in The Observer XT and simultaneously recorded on your hard disk to video files. The third video file can be created with an external MPEG-encoder and opened in The Observer. This setup allows you, for example, to score the interactions live, while you can log the individual's emotional expressions afterwards from the recorded video files.

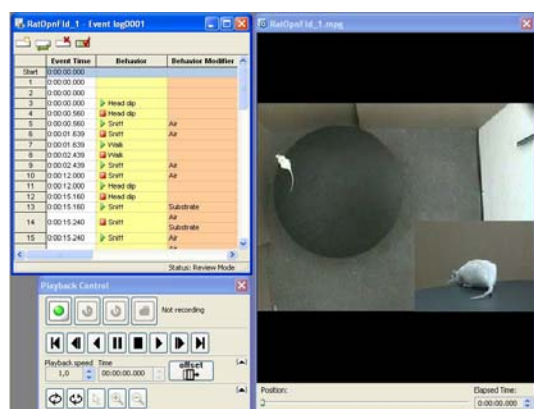
Another example of the use of multiple video files is Ainsworth's Strange Situation Test. This psychological test is used to investigate the bond between parent and infant. The Strange Situation Test is done in a test room in which parent and infant are introduced. The infant is encouraged by the parent to play with available toys. Next, in consecutive episodes, the infant is introduced to a stranger entering the test room, is separated from

and reunited again with the parent, is left alone and reunited with the stranger and eventually the infant is reunited for the second time with the parent. The response of the child and the parent in the different episodes gives insight in the type of attachment between parent and infant. In this test four cameras would be used: one to film the whole room, and three to individually record the actions of infant, parent and stranger. The images from the four cameras are recorded to video files for later detailed logging.

A third example of the use of multiple video files is of rat behavior in an open field. The open-field test is a paradigm used in neurosciences to study the effects of drugs on anxiety-like behaviors. With one camera, positioned next to the arena, you can record the behavior of the rat in detail. With an additional overhead camera, it is easy to record the location of the rat in the field. This video file can also be used in EthoVision® to automatically track the movement of the rat during the test.

Multiple event logs for one video

An Event Log File in The Observer XT contains logged events and/or comments. Within the same observation, you can log data in multiple sessions, each in its own Event Log File. This is useful if you want keep the logged data in an observation organized, for example, by subject, behavior or time-period.



For example, if you have a video file of a complete experiment of 3 hours consisting of distinct 10 minute sessions, you can log each session in a separate Event Log File. In The Observer it is very easy to create an Event Log File that continues where the previous one stopped; just click the stop line of the previous Event Log File, open a new Event Log File

and this new Event Log File will have a start time that coincides with the stop time of the previous one.

Video highlights

Sometimes you want to select specific clips from one or more video files to show these to colleagues or to use in a presentation. For instance, you might want to select a combination of clips showing an overview of all participants in a meeting and close-ups of certain persons. Of course, you can edit a video file in a video-editing program, but it can be rather time-consuming to find and select the right episodes from your video and cut and paste these in a new video file. In The Observer you can select specific events you have scored, for instance, all occurrences of a rat sniffing the floor or a baby smiling, in an Episode Selection. Based on this Episode Selection The Observer then can generate a media file that contains these episodes. You can insert transitions between episodes and add subtitles to transitions and episodes to create a media file that is perfect for presentations.

USB-camera and laptop

When it comes to the study of behavior in all its different forms (in neuroscience, psychology, zoology or usability testing), The Observer steps in as the professional software package for the collection, analysis and presentation of observational data.

You do not always need a complex and advanced setup for your research. With a simple USB-camera and a laptop with The Observer XT you can carry out an observation while the images from the camera are stored in a WMV video-file. For example, if you want to record the facial expressions of someone using a software program, you simply attach the webcam to this person's monitor, connect the webcam to your laptop with The Observer XT running and on the laptop screen you can see what the webcam is recording. This is an easy and quick way of collecting data. If you need more advanced options, but still want a mobile solution, we can provide you with a tailor-made portable lab.

The Observer XT is very flexible and works with both consumer and professional products. You can still work with analog video but first need to convert it to a digital format before using it in The Observer XT. For example, you can use an analog camera and convert your recordings to a digital format with an

MPEG-encoder. You can make a recording with a digital camera onto tape and play back this tape in The Observer XT during an observation. Alternatively, you can directly connect a digital camera to The

Observer XT and create a video file in The Observer while doing an observation.

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