Usability Testing Solution *Spectator*

Product information

Spectator

Usability Testing Solution

BIOBSERVE Usability

State-of-the-art recording and analysis solution

The usability testing solution *Spectator* provides state-of-the-art recording techniques combined with all necessary tools to acquire data in a meaningful and successful usability test. No matter whether you are looking for an easy to manage system for mobile testing, a solution to perform remote testing or a full featured usability lab for large scale usage, the *Spectator* satisfies all requirements. Due to its modular system design, this solution can be used for any kind of usability testing situation.

The *Spectator* system can record multiple incoming signals in their original quality, acquire and analyze observational data about test participants, measure and rate success and efficiency of task accomplishment, analyze behavioral patterns and compare behaviors of different participants. With the *Spectator* you can train people for certain tasks and analyze the training's progress and success.

Signal recording

The VGA signal is recorded with our Screen Recorder device, a stand-alone recording box that records the monitor signal in its original resolution and quality. No software installation on the test computer is required, all operating systems can be recorded. The video (all camera types can be connected) and audio signals are recorded, too. All signals are recorded independently but synchronized. If you record one video signal and one VGA signal, you will get two video files that are synchronized in time. No picture-in-picture, all recordings are available in their original resolution providing best quality and flexibility.

***Spectator* software**

The *Spectator* software suite provides everything you need to plan and manage test sessions. You may administer various scenarios, acquire all data in realtime with no need to reanalyze and finally, distribute the results in a comfortable and effective way. *Spectator* covers all these issues and is still easy to use.

You can manage different recording setups, schedule test sessions in a comfortable calendar, code observational data easily, create videos of the test highlights by auto-cutting and make presentations with your own corporate identity with the integrated report generator. In addition, the integrated User Access Control provides the possibility to use one system with different users without worrying to mess up someone else's data.

The user definable interface of the Spectator software provides an overview on all important information - during data acquisition and analysis.

Screen shot of the Spectator software

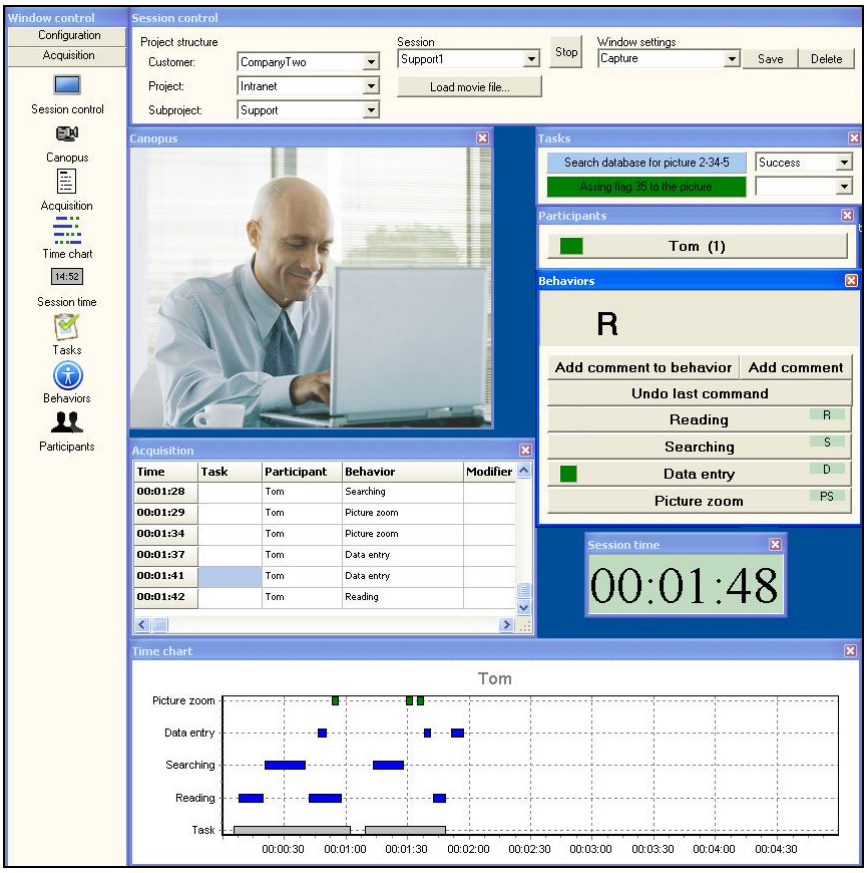
On the left side, the Window control lists shortcuts to all available information windows in the current test situation.

The session control window shows which session is currently recorded and the project it belongs to.

As any information window, the video signal windows (participant and monitors) can be switched on and off at will.

Additionally you can see the predifined tasks (one is already successfully completed in the screenshot), the name of the participant, the behavior list with the currently logged behavior, the recording time and a table with all recorded behaviors and events.

The time chart provides a perfect overview of all past and current codings.



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Spectator features

Lossless, flexible and pure digital signal recording

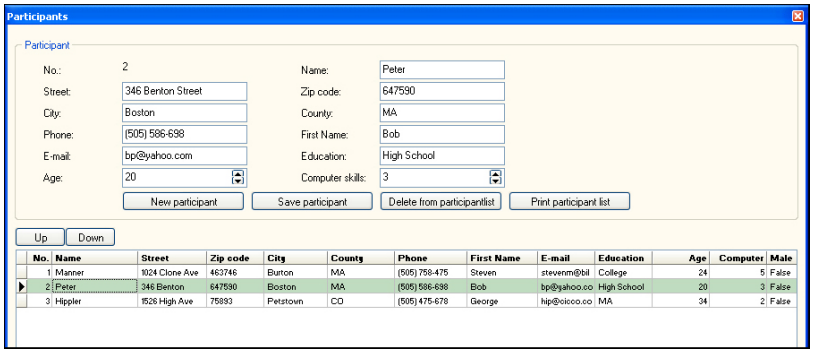
All video and VGA signals are recorded in time synchronized files in their original quality. All kinds of computers and devices with a VGA or DVI output can be recorded. Because the Screen Recorder is an external device, no software installation on the test computers is required - no video mixers necessary.

Manage different recording setups

If you work with different recording scenarios (e.g. one VGA and one video signal in the morning, two VGA and three cameras in the afternoon) you can define these recording situations in the software. Simply select the setup you need from a pull down list and start recording. Rewireing is not required.

Project database

Organize your recordings! With the integrated user definable project database you can easily manage and organize your sessions. This is very comfortable, especially for the analysis of multiple sessions. It makes it easy to find and pool your data of specific projects.



Participant database

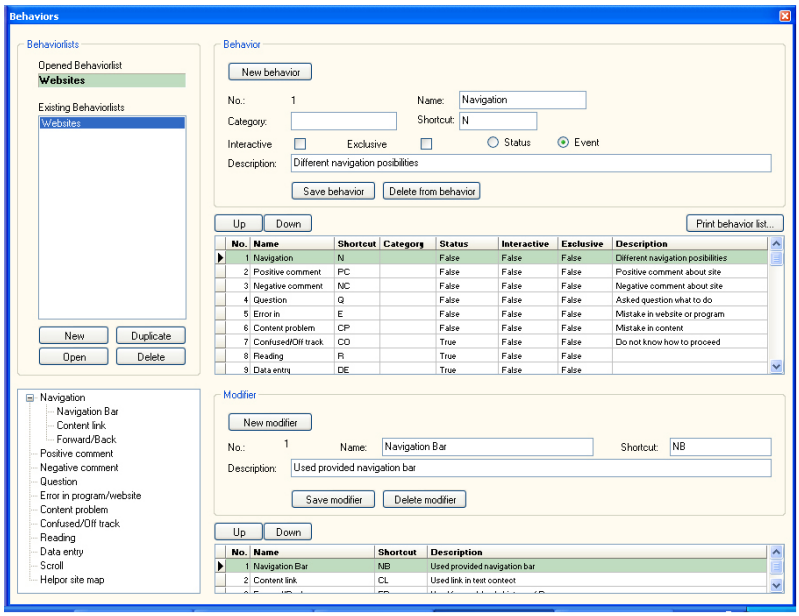
The user definable participant database enables you to administrate your usability test participants within our *Spectator* software. You can save contact data and participant skills (education, computer experience, etc.) and you can also analyze your data based on that information (e.g. pool data for all participants with a certain computer skill).

Task list database

Create different task lists and save them for repeated use in your task list database. Tasks can be added, changed and deleted easily. During behavior recording the tasks are used to measure the duration until task fulfilment and to rate problem solving success.

Behavior lists

Create different lists with the behaviors you want to code (web site testing, product testing, etc.). For each behavior a keyboard short cut is assigned. You can describe each behavior more detailed by assigning so called modifiers. For example you could add the modifiers “content link”, “left navigation bar” and “top navigation bar” to the behavior “web site navigation”. Later on you can easily analyze how many time the participant spend navigating and which of the different navigation possibilities he used.



Composing a test session

To configure a test session, simply choose a task list, a behavior list and one or more participants. Assign the session to a project in the project database and you are ready to go.

Session planer

The session planer is a fantastic tool to manage your test sessions. It is a fully featured calendar where you can easily schedule test sessions by drag & drop. You can even assign test sessions to your team members and colleagues.

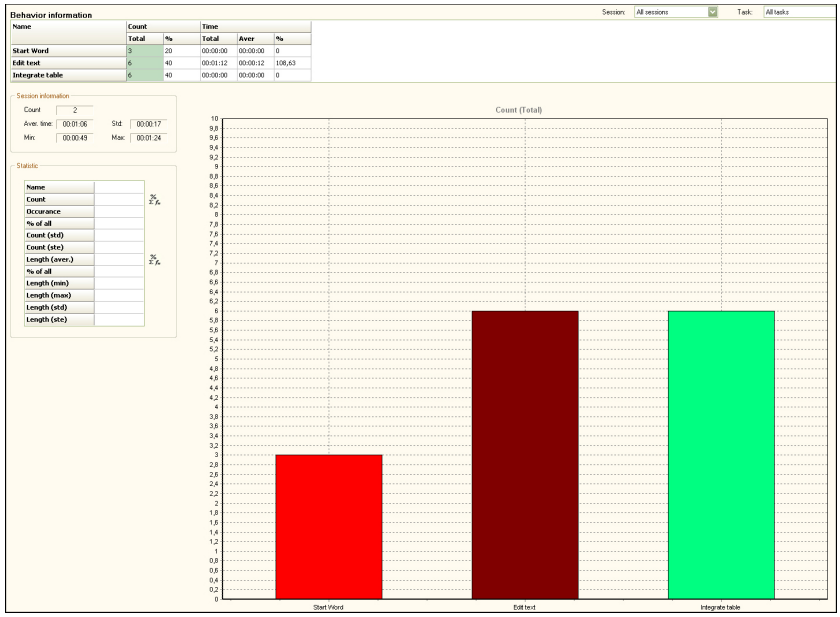
Data acquisition

During the session, the behaviors are coded either with the defined short cuts on the keyboard or with the mouse. An unlimited undo function is available. Each coding you do creates a bookmark in the video and you can use the codings to jump to the appropriate scenes in no time. Of course you can also enter text or assign comments to certain behaviors. You can arrange the flexible interface to your own convenience.

Play & Edit

After data acquisition you can play and edit the videos along with the data and insert or delete behaviors easily. All codings you did can be modified.

Integrated Task and behavior analysis
The task & behavior analysis offers statistical tools to summarize and analyze the coded behaviors and tasks. Templates can be used to perform the same statistical analysis again and again.

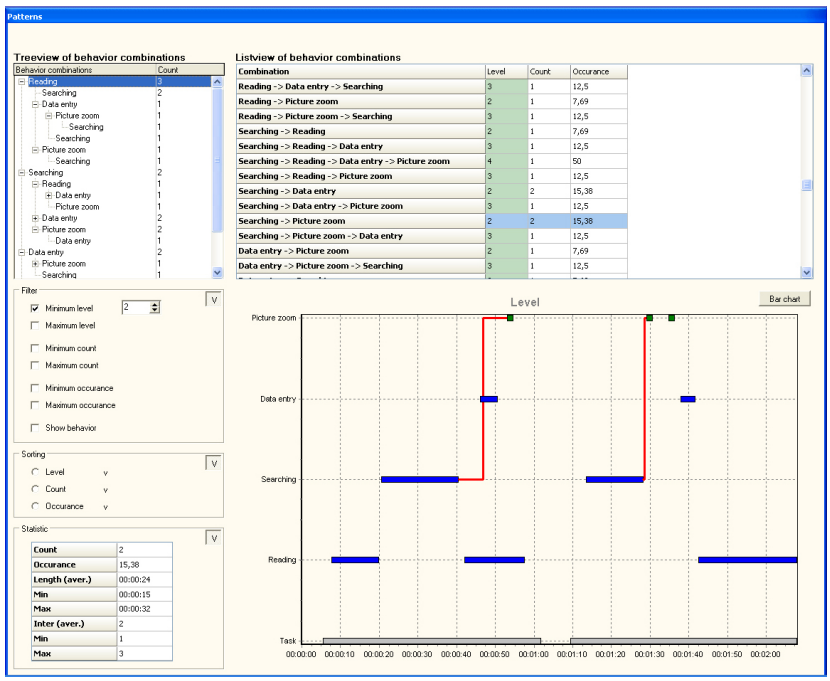


Pattern analysis
With the pattern recognition tool, you can detect patterns in the coded behaviors - if there are some. You can use different parameters and filters to adapt the pattern recognition to your needs.

Reliability analysis
If multiple observers code behaviors of participants, you can use this tool to compare results and receive a reliability value.

Report generator
The integrated report generator creates standardized session reports automatically. Report design is user defined, so you can simply summarize the most important results (time spend on task, success, failure, time out … e.g.) and send them as pdf file to your colleagues and customers.

Video editing
You can compose highlighted presentation videos with the most interesting scenes and data within the application. No separate video editing software is required.

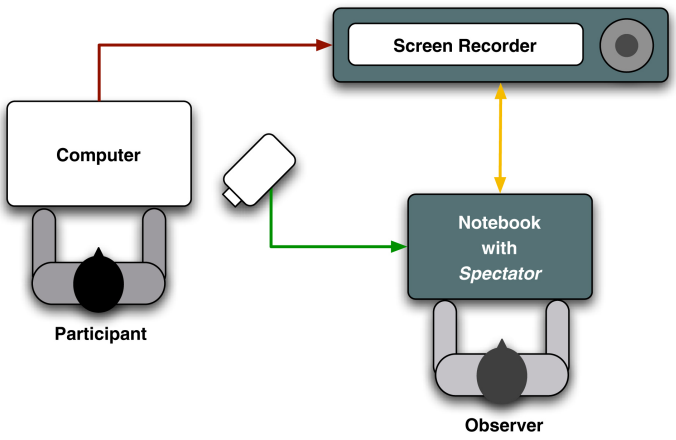


Free player software
With the free Spectator Player software you can share and distribute your videos and data in a very comfortable way. You can also integrate your own corporate identity design into the player software.

Remote Testing
The system can be used for remote testing scenarios, where VGA, video and audio signals are recorded via the internet. All signals are stored at the observer's location.

Streaming and remote usability lab observation
Because the system works fully digital, all signals can be relayed into other rooms or locations via the inter- or intranet. Thus it is possible to show the test session live wherever you want.
A remote lab observation tool is available that allows real time observation and two-way audio In the ongoing test session. If you are in charge of several test locations, you can easily switch between the labs and see what is going on in real time.

Example of a mobile setup
The Notebook's monitor signal goes into the Screen Recorder, where it is recorded in a digital movie file.
The video and audio signal from the digital camera goes via FireWire into your notebook and is recorded in a file, too.
To control the Screen Recorder, your notebook is connected to it by an Ethernet cable (Start/stop recording, file transfer).
You are sitting near to the participant and you can see his monitor. If you can't see the participant's monitor you can connect another monitor to the screen recorder and display the participant's monitor image there as well.



Please visit our website www.usability.biobserve.com for more information and movies that show the system in action. You can also request a webinar where we show you the software in a one-to-one presentation.

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Frequently Asked Questions and Answers

How many signals (camera, VGA, etc.) can be recorded and synchronized?
Basically there is no limit of the number of signals that can be recorded and synchronized. If you want to record a lot of signals you maybe need an additional recording box but there is no limit in the Spectator software. That way the system can easily be scaled, even if you start with a small system in the beginning.
What kind of cameras can be connected?
All different types of cameras can be connected an recorded (analog, digital, composite, FireWire, USB, S-Video and IP network cameras). We also support high resolution cameras.
Can the computer screen be captured?
Of course our solution captures the VGA signal. With our Screen Recorder you can record the VGA signal in its original spatial resolution. No software installation on the test computer is required.
How many audio channels can be recorded?
Audio can be recorded either through the camera(s) or as separated signals. Up to 5 different audio signals can be recorded.
How long can be recorded?
That only depends on the available disk space. We have systems running that record 6 video, audio and VGA signals for 6-8 hours perfectly synchronized.
What kind of video compression codec is used?
In most cases, we use the very common DivX codec, in some cases we use lossless MJPEG (e.g. radar). All video files can be watched with standard video player software.
Is it easy to manage different recording scenarios?
Yes. You can configure different recording setups that can later be selected easily from a pull down menu.
Can additional signals (eye tracking, physiological data, etc.) be recorded?
Yes, additional analog and digital signals can be integrated and synchronized.
Is live coding during the recording possible?
Of course you can code behaviors and events during the recording. After the recording you can edit all your codings and/or do a recoding of the session.
Can several observers code simultaneously?
Yes. Several observers can code independently from each other. In the analysis you can compare their codings with several filters and do a reliability check automatically.
Is the coding procedure optimized for keyboard usage (short cuts/hot keys)?
Yes, for each behavior or event you want to code you can assign a short cut on the keyboard you want to use. Of course you can also use the mouse and push buttons on the screen to code.
Can new behaviors/events added during the recording?
Yes.
Are the codings assigned to the video recording?
Yes. Each coding you do creates a bookmark in the video and you can use the codings to jump to the appropriate scenes in no time.
Can the codings be assigned to a certain task?
Yes.
Can behaviors be categorized and are the categories shown during the recording?
Yes.
Yes it possible to enter comments and other text in addition to the coding?
Yes and these will also be assign to the video recording.
Can comments and text be assign to a certain behavior?
Yes.
How many tasks, behaviors and events can be coded?
Unlimited.
Can tasks be repeated during the recording?
Yes.
Can the tasks be rated?
Yes, you can define up to six levels to rate the task (e.g. success, time out, failure, ...). In the data analysis you can use these ratings to filter the tasks.
Is it possible to edit the codings after the recording?
Yes, all your codings can be modified offline (delete codings, change timing, add codings).
Can codings of several observers be merged?
Yes.
Is a list with all codings of all persons available?
Yes.
Is it possible to search for certain codings?
Yes. All entries and codings you made can be searched.
Is it possible to filter the data for codings and categories?
Yes.
What kind of automated analysis is available?
How often a behavior occurred, duration of behaviors, duration for tasks, task ratings, behaviors per task, occurrence of categories. For all parameters you get Min., Max., Mean, Sum values, standard error, standard deviation, probability of occurrence. All data can be pooled for several participants based on user definable definitions.
Is pattern analysis available?
Yes, and it is much more sophisticated than in competitive products.
Are diagrams presented for all the analyzed parameters?
Yes.
Can the diagrams be exported?
Yes, all figures can be saved in various formats. The system supports also vector based formats so you can edit the figures in other programs (e.g. resize).
Is it possible to create highlighted videos?
Yes. Videos can be created automatically based on user definable rules or manually. In addition to a simple picture-in-picture video you can also create a presentation with the different synchronized video and data streams. You can adapt this presentation to your corporate identity.
How can other people watch the synchronized videos without having the Spectator software?
We provide a free player software to watch the synchronized videos in order to provide everybody the experience of the great recording quality.
How is the reporting supported by the system?
The software contains a user definable report generator that can be configured to your individual needs and that can be adapted to your corporate identity. This tool generates a pdf report file based an your template with information, data, diagrams and text automatically.
Is a backup tool integrated in the software?
Yes, you can define a directory (e.g. on a server) where the data are stored as a backup.
Is it possible that different persons use the system with their own settings and can only access their files and data?
Yes, the software supports the Windows User Access Control (UAC). When people log in with different accounts, they can only access the data and recordings they created. We have systems in universities, where 130 students have access to the system with their own log in data. Each student can only see the recordings he made with the system.

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