How does AV recording tool Viso work?

AUDIO AND VIDEO RECORDING TOOL VISO

Viso® is the easy-to-use solution for creating video and audio recordings. The all-in-one system has proved itself as an ideal instrument to train and educate students, examine dyadic relationships, enhance teamwork training, conduct user experience research, and much more.

With Viso, you can make independent recordings in multiple locations at once, with up to four Pan-Tilt-Zoom cameras in each location. There are no limits in number of users or number of rooms. A big advantage is that the system can be used by various trainers and trainees simultaneously, without getting in each other's way and without jeopardizing anyone's privacy. You can even share one Viso system with different departments without compromising on privacy.

During a session, or afterwards, you can tag specific points that stand out. Recorded videos are directly available for playback from any location, on any device. With all this, Viso provides the video material needed to gain insights into processes, human performance, and communication.

Use Viso as your main recording tool and discover the ability to control, record, evaluate, and share.

READ THIS PAPER AND LEARN

- how Viso can benefit your work
- which applications Viso is suitable for
- what to expect of the Viso features
- how data protection is guaranteed

TOP 10 REASONS WHY VISO WILL BENEFIT YOUR WORK

Viso is well-organized, mobile friendly, and has a super quick playback function to name a few interesting gains. All you need is stored in one system and is super easy to work with. On the following pages, we created a infographic for you to discover all the benefits.

1. Well-organized
Record training sessions in multiple rooms

The uniqueness of Viso is that you can record in an unlimited number of rooms simultaneously. With one to many concurrent users, and from one to many concurrent sessions.

2. Everyone can use it!
Get to know this AV tool in just 15 minutes

Navigating through the program is quick and simple. It is easy to understand how it works, which saves lots of time. Viso's clean interface easily guides you to an efficient and simplified workflow.

3. No more hassle
Scheduling recordings helps to keep you organized

Set up recordings in advance and automatically start and stop these recordings at a scheduled time. An ideal solution when operating in a multi-room lab in which multiple sessions occur simultaneously.

DASHBOARD   LOCATIONS   SESSIONS   CODES

JUNE 2021

	MO	TU	WE	TH	FR	SA	SU
22	31	1	2	3	4	5	6
23	21	22	23	24	11	12	13
24	21	22	23	24	18	19	20
25	21	22	23	24	25	26	27
26	28	29	30	1	2	3	4

RECENT SESSIONS
Group Study Room 0.101
Group Study Room 0.102
Demonstration Room

SESSION INVITATIONS
No session invitations

SESSIONS - 23 JUNE 2021

12:00 - 12:30
Team Skills Training 1 - Group Study Room 0.101
Marc Adams

12:00 - 12:30
Interviewing Techniques - Group Study Room 0.102
Marc Adams

12:00 - 12:30
Team Skills Training 1 Debriefing - Demonstration Room
Rose Bennet

12:30 - 13:00
Interviewing Techniques Debriefing - Meeting Room 1.015
Marc Adams

13:30 - 14:00
Team Skills Training 1 - Group Study Room 0.101
Marc Adams

4. Mark events of interest
What behaviors need attention?

Viso is more than just an AV tool. You can tag specific points that stand out during a session, for example learning goals, and easily jump right to those points in the video during debriefing. It enables you to quickly give feedback using personalized markers.

5. Mobile friendly
Accessible from anywhere and anytime

You can start and stop recordings, and view and review recorded sessions from wherever you are on any device, using the Viso Web App. Join sessions from outside the Viso Lab from your own desk.
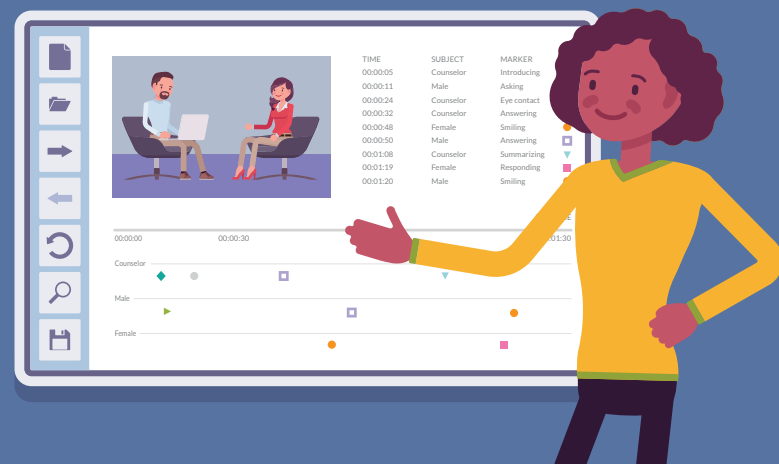
6. Synchronize all data streams
Capture the complete picture

Register how a test participant interacts with a (new) design or record a patient monitor by capturing that full screen. Displaying the eye tracking gaze-overlay or facial expression data is also possible. The screen captures are synchronized with the AV recordings of Viso.

7. Quick video feedback
No waiting time for playing back videos

Recorded videos, including markers and comments, can be played back right after recording from any location. Video feedback is an effective method to learn and improve (soft) skills.

8. Easy import
Videos from your smartphone

Benefit from importing pre-recorded videos from your smartphone or older video recording system for a simple and easy way of storing, annotating, or debriefing the videos.

9. Multiple data streams in one view
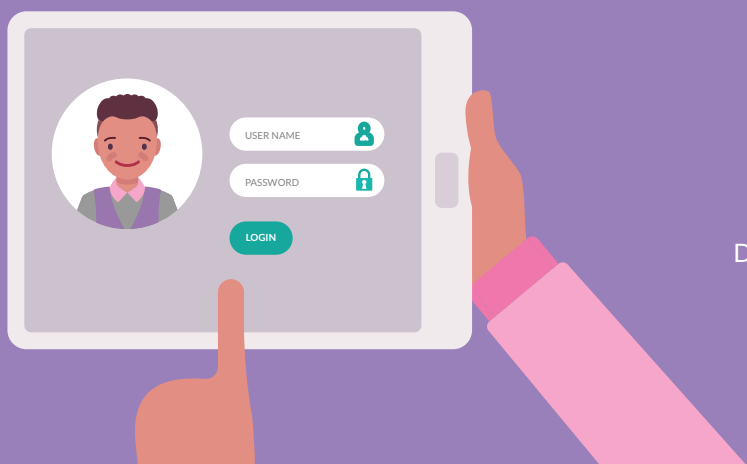# All you need is this all-in-one system

Everything is arranged in one system using up-to-date technology. Multiple rooms and recorders plus facial expression analysis, screencaptures, and eye tracking are all connected in one reliable and stable integrated setup.

10. Data protection is covered
Be sure of a high level of security

Data protection is completely covered. A user login is required, an audit trail is enabled by default, and the four different user roles determine the available rights and functionalities. Viso is fully compliant with HIPAA and GDPR.

Viso has been developed to provide audio and video feedback in learning processes. It can record and play back scenarios, training sessions, and role-plays in an easy to use way. The actions, behaviors, and interactions of the learners are recorded and can be assessed during debriefing. This allows to learn new skills and improve already existing skills.

Interested in a free demo? During this demonstration, a sales representative will conduct a remote walkthrough with you via screen share, explain all features and benefits, and can answer any questions you may have.

REQUEST MY FREE DEMO

VISO IN VARIOUS INDUSTRIES

Programs that use simulations, carry out mock interviews, test medical skills, and much more, can all benefit from Viso for video capture.

Viso can be applied to almost every need or industry. The fields of education and training, psychology, user experience, and healthcare in particular have found Viso to be an invaluable tool that drives growth and performance.

EDUCATION AND TRAINING

Education and training can take place in a wide variety of fields, and in many different settings such as classrooms and skills labs. Education can focus on technical theory, or on training human behavior, didactic methods, soft skills, and psychological aspects.

More and more video feedback is used in education and training facilities. It continues to prove its effectiveness for both educators and students or trainees. By using video and audio recordings in education and training, students and educators can receive, and benefit from, direct feedback. Feedback is an essential part of effective learning since it provides information about how we are doing in our efforts to reach a goal.

A great benefit of Viso is that it allows you to give feedback with personalized markers, while the assessed work is still fresh in a student's mind. This strengthens the learning effect!

HEALTH CARE AND MEDICAL DEVICE TESTING

The healthcare industry is an ever-changing field that requires extensive skills and training for its professionals. Different disciplines work together to ensure high quality patient care, and they need to be prepared for the team-work involved.
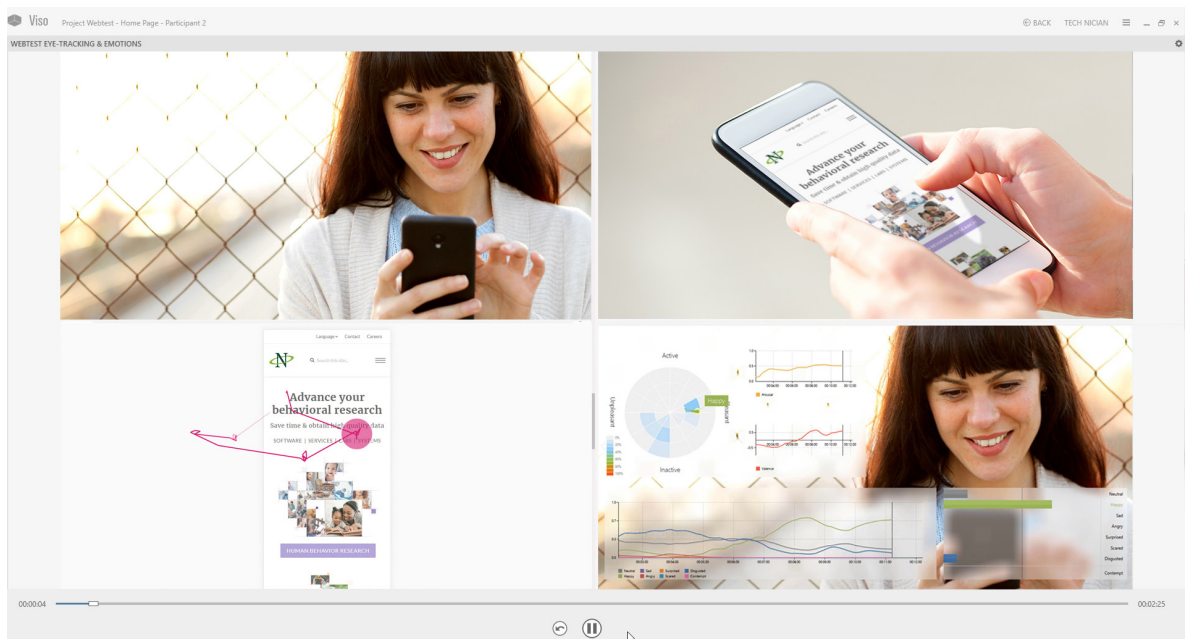
Both medical and nursing students and professionals can benefit of training courses in a clinical simulation lab. With Viso at the core of the lab, students and professionals can practice the following in a safe learning environment:

- non-technical skills (e.g. CRM, communication, collaboration, team leading, and team building)
- technical skills (e.g. how to best use medical equipment, prioritizing, critical thinking, decision-making, and situational awareness)
- quickly giving feedback
- overseeing the whole situation

USER EXPERIENCE

It is important and extremely interesting to know what happens to your users when they interact with your product, website, application, or online communications. Testing that user experience includes everything the users see, hear, and do as well as their emotional reactions.

Viso's easy-to-use interface easily guides you to efficient usability tests. It makes scoring events of interest quick and easy. For example, with a simple click of a button, select a marker to note that your participant made a usability error, or responded as "surprised" to the presented advertisement. Besides, capturing the screens the participant interacts with, for example a website, and capturing the facial expressions and eye gaze ensures that information about the usability test is complete.

Video recording obser-
vations provide a high
degree of reproduci-
bility.

PSYCHOLOGY

Psychologists rely upon data to make sense of the world. Among the methods used for collecting data, video observation is a non-invasive form and will enable them to capture the (inter)actions of the subject(s). Panning and zooming brings particular aspects of behavior into focus. Multiple camera views create new perspectives on the same behavior. For example, autism researchers often wish to note events of interest related to the reaction of the child towards his or her parent in particular circumstances. Viso can do this for you!
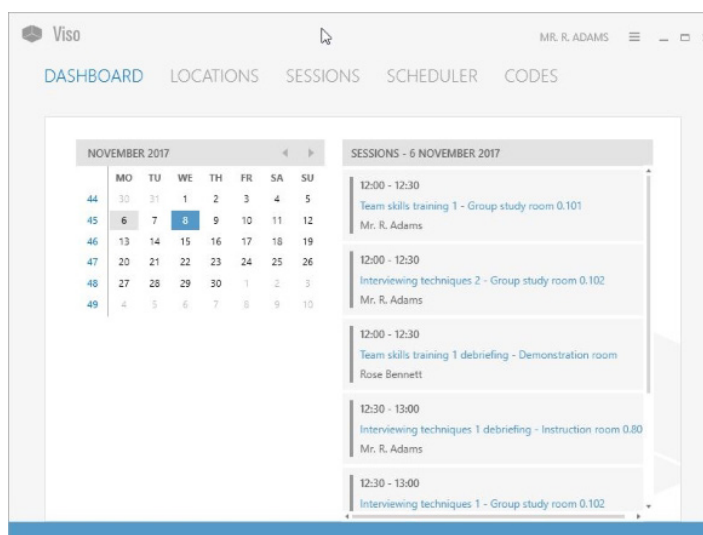
Video recording observations provide a high degree of reproducibility; video recordings can be re-played any number of times. The immediate available recordings of Viso can take a central place in the evaluation of such an observation session. For example, they can be used for the therapist to discuss with a multidisciplinary team which diagnosis fits best, and for the researcher to analyze the behaviors recorded.

WHAT DOES VISO ENTAIL?

When you log in, the Viso interface shows five tabs: *Dashboard, Locations, Sessions, Scheduler, and Codes* (subjects and markers). The interface depends on your user role.

Viso opens by default with the dashboard which includes a calendar and a sessions list. Days on which sessions are scheduled or have been recorded are shown in bold in the calendar.

LOCATIONS

The *Locations tab* is present when your user role allows session recording. It contains a list of the locations that are set up by the person who manages the Viso set-up. A location is an area with a number of cameras and microphones. In a typical set-up this number of cameras varies between one and four. The number of locations and cameras per locations depends on your Viso license.

Provided that all locations are housed on the same local network dedicated to Viso, recordings can occur across multiple buildings at the same time.

In the *Locations tab* you can

1. Select *one location* and record a session
2. Select multiple locations to record *separate sessions* for each location
3. Select multiple locations to record *a composite session*

Read more about these three recording options on page 12.

By default, a session is one recording with all cameras in one location. For instance, with the default settings, you can obtain two or more sessions if you record with all cameras in two or more locations. However, you can also select the option to start recording in multiple locations simultaneously. You can then choose to create one composite session of all locations, or a separate session for each location.

SESSIONS

The *Sessions tab* contains the list with recorded sessions that you are entitled to access. Here, you can open and play back recorded sessions, for example to review it yourself, annotate it, or present it on a secondary display for debriefing. Furthermore, you can manage your recorded sessions. This includes renaming or deleting sessions, changing the annotator or the session's owner, import videos or copy videos for external use.

Importing pre-recorded videos ensures for central storage and offers the possibility to debrief the session using the video in Viso. It also offers the possibility to annotate videos that were recorded outside Viso.

SCHEDULER

In the *Scheduler tab* you can schedule your session recordings in advance. The video recording starts automatically in the set room at the predefined time. The scheduler can be viewed by anyone in the Viso network with the proper rights. However, the details shown depend on the user role.
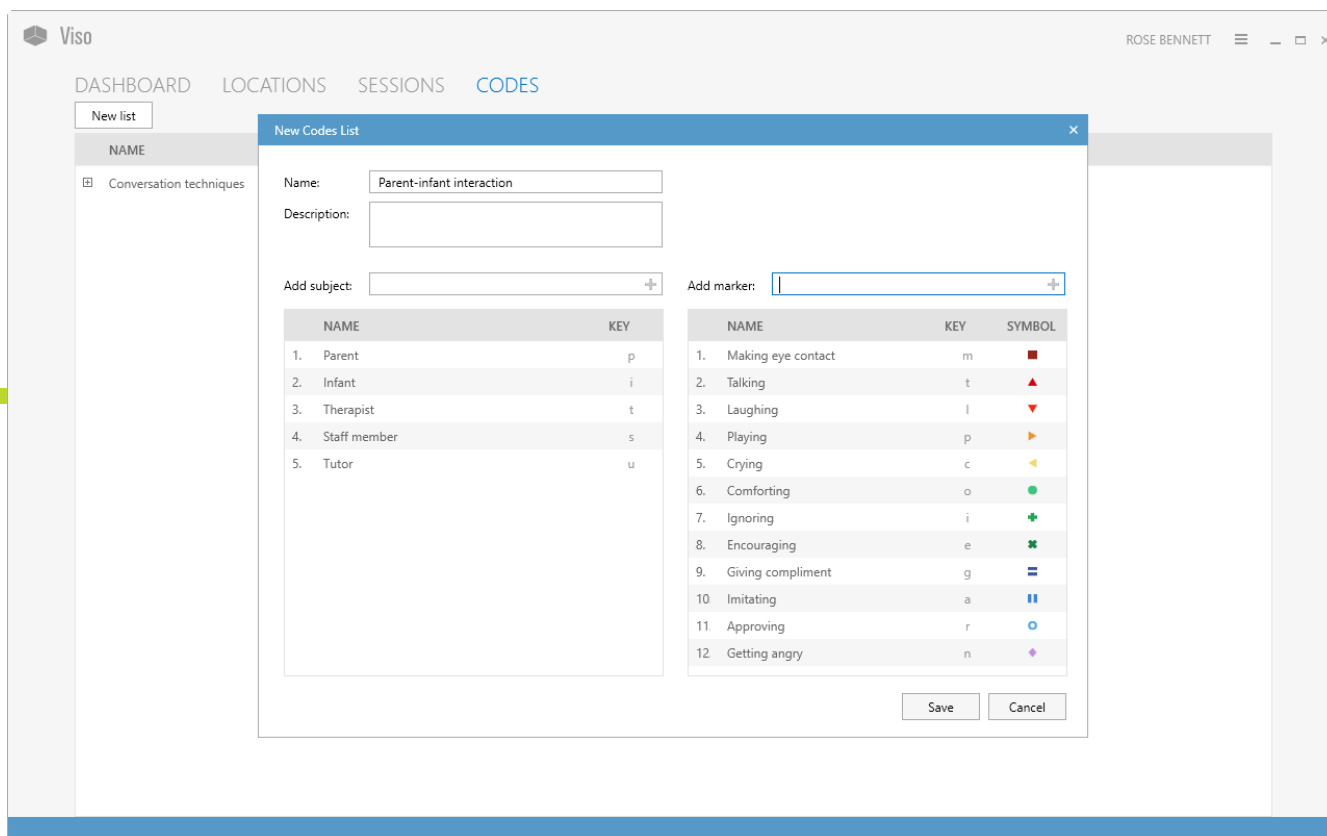
A scheduled session always has priority over a session that you start manually by opening a location and pressing the Start recording button. This means that you cannot open a location when it is in use in a scheduled session recording. Also, a manual session recording will be terminated when a scheduled session with the same location is about to start.

CODES

In the *Codes tab* you can create *Codes lists* with *Subjects* and *Markers*. Subjects are people in the video that are under study. Subjects only need to be defined if multiple people are observed at once and you wish to annotate their individual behaviors.

Markers are used to annotate events of interest, for example, the start of a surgery session during a medical simulation, or whether a taken action was good or wrong during a usability test, or the onset of an instruction phase in a classroom.

Subjects and markers can be selected prior to recording, during recording, and even after recording to allow maximum flexibility.

The *Marker list* can contain up to 36 unique markers. Optionally, link markers to subjects, for example to mark a question by the teacher and the answer by a student. Markers specify a moment, and have no duration. You can mark events during session recording, or while reviewing it.

The annotation functionality also allows you to enter free text as remarks while the session is being recorded. This is useful if something happens during the observation that you did not define as a marker beforehand.

RECORDING METHODS

With Viso, you can start recording sessions in one location at a time or in multiple locations simultaneously. You can select whether the recordings in the multiple locations result in multiple sessions or in one composite session. So, there are three options:

1. **Single session**

   This is the default recording option for a single recording of one location.

2. **Separate session**

   A selection of multiple locations is possible. For each selected location, a separate session is recorded. This recording method allows you to turn on all the cameras in multiple locations simultaneously to record similar training sessions at once.

   For example, do you need to record mock interviews to teach a large group of students how to handle a 'bad news conversation' all at the same time? Viso can arrange that with the separate session recording option! As a trainer, you are able to check every location from the control room to see if the students are ready. With a single click of the record button, recordings in all rooms start (or stop) at the same time.

3. **Composite session**

   A selection of multiple locations is possible. This allows you to capture a sequence of scenarios in multiple rooms while Viso combines the recordings into one chronological session. This unique Viso option is a very useful when you need to follow your participant every step of the way throughout multiple rooms.

   Imagine you want to train your medical students and need to follow them through different rooms. For example, the experiment starts with an intake in room 1, and then the doctor walks to another room where a nurse receives some information and in the third room the patient is being treated. In Viso, it is possible to capture this scenario in one composite session recording in order to get a more detailed training situation and better debriefing.

SINGLE SESSION	COMPOSITE SESSION	SEPARATE SESSIONS
Single location recording	Multi location recording	Multi location recording
Standard scenario with 1 group	Follow scenario	Training scenario with N groups
1 location	2 or more locations	2 or more locations
Result: 1 session (+ Event Log & Codes list)	Result: 1 session (+ Event Log & Codes list)	Result: multiple sessions (+ Event Log & Codes list)
No carousel: no event scored	Carousel: event scored	No carousel: no event scored
Participants see a single live view	Participants see the trainer view	Participants see a single live view

REMOTE RECORDING AND VIEWING USING WEB APP

You can use the Viso web application to remotely view live video streams, start and stop recordings and remotely playback recorded sessions, from any location and on any device, such as iPhones and iPads. This allows you to join sessions from outside of the Viso lab and to involve stakeholders, allowing them to join the session from their own desk.

In *Viso Web App* a combined view of all camera recordings can be selected. This allows you to see all images from the up to four cameras during recording, as well as during playback.

In addition, you can export these combined videos, instead of exporting them one by one, which speeds up your work.

PORTABLE VISO LAB

For recording sessions on-site, for example in classrooms of various schools, daycare facilities, multiple consultation rooms, or operating rooms, it will come in handy to have a flexible lab which you can take with you anywhere you go. The solution for this is the *Portable Viso Lab*!

It is compact and complete and easy to set up. It contains all equipment needed to make live recordings in any context. Just open the suitcase, set up your lab equipment, plug in, and record!

DEBRIEF YOUR RECORDED SESSIONS

The videos recorded in Viso are immediately available for debriefing. This is a great benefit since it allows you to give feedback or discuss the events of interest while the assessed work is still fresh in a participant's mind and before the participant moves on to subsequent tasks.

The marked events of interest appear both in the event log and in a graphical timeline. You can browse through the video synchronized to the timeline, and see exactly what happened. During debriefing, use the filter option to select a particular person or event of interest. With the *'next marker'* button, you can move quickly through the timeline.

HIDE MARKERS WHILE DEBRIEFING

In *Presentation view*, only videos are shown on the second display, not the markers and remarks on the timeline or in the event log. This allows the participants to remain focused on the displayed videos, increasing the learning experience. Meanwhile, markers and comments are visible to the educator to assist in a proper debriefing session.

DATA PROTECTION REGULATED IN VISO

Viso is used in many different fields: from psychology and healthcare to education, consumer research, user experience, and more. In all these applications, Viso provides a high degree of security to protect the data from illicit use.

Legislations, such as the General Data Protection Regulation (GDPR), the Health Information Portability and Accountability Act of 1996 (HIPAA), and the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 state that data should be kept in a safe place and should not be accessible to others. In Viso, data protection is completely covered.

Viso is a closed network software solution. Data is stored on video servers in the Viso network under the control of the security procedures of the user's network. In Viso, several features have been implemented to safeguard unauthorized access:

- *Built-in user management feature:* grants access to Viso at different user levels.
- *Data in transit is encrypted by Transport Layer Security (TLS)*: prevents information from being extracted by network traffic sniffing, and prevents data from being altered during transfer.
- *Audit trail functionality:* User activities regarding the use of video (recording, viewing, replacing, and deleting videos as well as video import and export) are registered in the audit trail functionality which is enabled by default.

Users are logged out automatically if a preset time of inactivity is reached.

USER MANAGEMENT

Viso has multiple user roles that differ in rights to work with the program. This ensures that certain activities, such as managing users and locations, session recording, and session viewing can only be done by those whose user role allows it.

1. *Technician*
   Full access to all Viso functions. Can create departments, groups, locations, and assign roles.

2. *Administrator*
   Has similar options as the Technician for the assigned department. The administrator cannot setup the cameras, and cannot stop someone else's recording or upgrade the software.

3. *Trainer*
   Can create groups in assigned department(s), make videos, export own files, delete own files, rename own video files, start/stop own recordings, make codes lists.
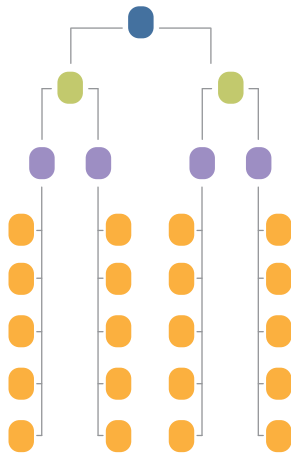
4. *Trainees*
   Can view and review a video recording of which the Trainee received session ownership, sessions for which he/she received annotator rights and sessions for which he/she has been invited.

Users that have rights to create sessions can invite others to view them.

The table on the next page summarizes the rights of the different user roles.

When Viso is connected to the domain, importing of domain users is enabled by using a Lightweight Directory Access Protocol (LDAP), allowing users to use their known username/password combination.

Technician — Full access to all Viso functions.

Administrator — Same as Technician, except for technical setup of the system and upgrading ability.

Trainer — Can start/stop, use, and see his/her own recordings and files, make marker lists, and invite others to participate.

Trainee — Can only access recordings after being invited.

	Technician	Administrator	Trainer	Trainee
Settings & upgrade	✓	✗	✗	✗
Location management	✓	✗	✗	✗
User management	✓	✓	✗	✗
Create marker lists	✓	✓	✓	✗
Record sessions	✓	✓	✓	✗
View live sessions	ALL	ASSIGNED DEPT.	OWN/INVITED	INVITED
Playback sessions	ALL	ASSIGNED DEPT.	OWN/INVITED	INVITED
Annotate sessions	ALL	ASSIGNED DEPT.	OWN	INVITED
Delete sessions	ALL	ASSIGNED DEPT.	OWN	✗
Export sessions & OBS import	ALL	ASSIGNED DEPT.	OWN	✗
Access to webapp	✓	✓	✓	✗

FLEXIBLE AV SYSTEM

To offer maximum flexibility, Viso can be setup to be used by different departments and groups within the same company, organization, or institution.

For example, at a university of applied sciences both the Nursing and Communication faculty can use the same Viso system, with their own locations without having access to each other's video sessions.

DEPARTMENT LEVEL

Per department, you can assign one or more locations, for example a simulation room, where recordings take place. Users of a department only have access to the locations that have been assigned to that department.

GROUP LEVEL

A faculty may have more than one class during an academic year, or a medical institution may have more than one team. To bring the members of one class or team together in Viso, a group can be created. Selecting a group of students to participate in a session is quicker than selecting each student individually.

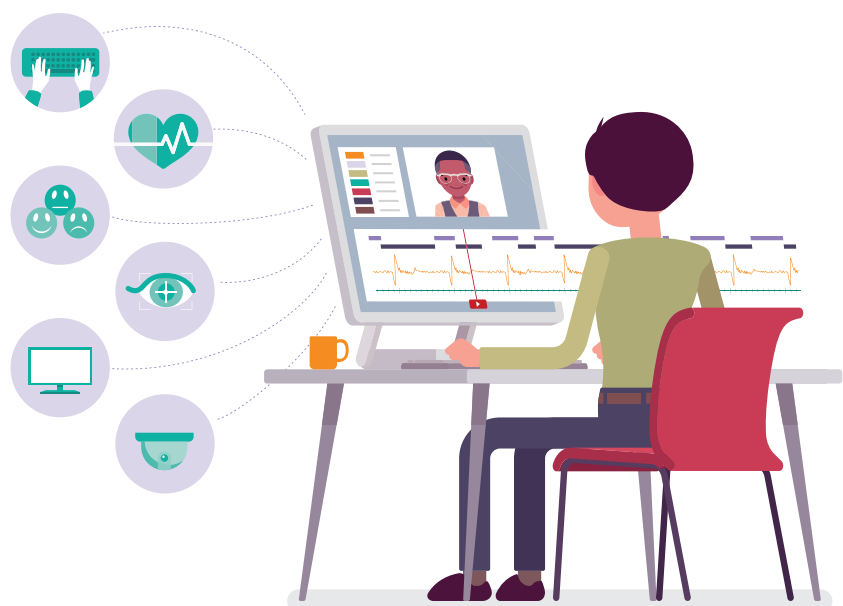# DETAILED ANNOTATION: COMBINE VISO WITH GOLD STANDARD

Make the most of your project by analyzing your Viso sessions in The Observer XT.

You can benefit greatly from combining Viso and The Observer® XT, the professional and user-friendly software package for the collection, analysis, and presentation of observational data.

All markers, comments, videos, and audio recorded in Viso are quickly and easily imported into The Observer XT. When exporting or importing sessions, the system requires a username password combination to ensure privacy. Once data from Viso is imported into The Observer XT, further behavioral coding and advanced analysis options easily convert qualitative data into quantitative results.

The Observer XT provides comprehensive statistical insights into coded behavior. It generates various types of output, including frequency tables, duration data, and other statistical summaries. It helps to discover behavior patterns, outliers, deviations, or anomalies.

Moreover, you can perform a lag sequential analysis to analyze the order of events and a reliability analysis to measure the agreement between two or more raters, for example.

SUPPORT

Viso is the multi-video, multi-room recording suite that includes everything you need to produce a high-quality project. Installation, support, and training are provided to get you started quickly!

Moreover, Noldus will keep the system working optimally. We offer software upgrades to the latest version, full professional support via phone/e-mail, and onsite maintenance visits. Also, in the Online Help section you can easily find information about any aspect of Viso.

Feel free to contact us or one of our local representatives for more detailed information, technical specifications, or user stories. You can also visit our website.

CONTACT US

INNOVATIVE SOLUTIONS FOR BEHAVIORAL RESEARCH

Powerful software tools, fully integrated labs, and expert consultancy. Trust our more than 30 years of experience to make your project a success.

Trusted by researchers and trainers around the world.

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