TrueConf

TrueConf 8 Client Application

User guide

This documentation is intended for Windows, Linux, and macOS users

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1. Installation and getting started

This guide is intended for Windows, macOS, and Linux users because TrueConf client applications for desktops are cross-platform and have the same features and UI.

1.1. TrueConf desktop client application features

> *i* Please note that the features listed below are available when the application is connected to the most recent versions of TrueConf Server or TrueConf Enterprise. If you connect to older versions of the video conferencing server or to the TrueConf Online cloud service, some of the following features may not be available.
>
> For more details, check the comparison table for TrueConf Server and TrueConf Online.

- Single Sign-On/Active Directory Federation Services (SSO/AD FS) authorization in the application
- Ability to set up connection via proxy, including the use of system settings and manual configuration
- Automatic discovery of available servers
- Enjoy 4K (Ultra HD) video calls and conferences with a frame rate of 60 fps
- Call VoIP users, landline and mobile phone numbers and send DTMF commands
- Call SIP/H.323 and RTSP devices
- Point-to-point video calls can be run directly between the users bypassing the server
- Conferences with up to 1500 participants (up to 1600 when UDP Multicast mode is used on the server)
- Video communication modes: one-on-one call (point-to-point) and conferences of different types: all on screen, video lecture, smart meeting, and moderated role-based conference.
- Ability to organize events with simultaneous interpretation which makes it possible for users to select one of the audio tracks with the required language
- Hold both private video conferences and public webinars that can be joined by guest participants
- Schedule conferences, create virtual rooms, and send email invitations to meeting participants
- Quick call-to-conference escalation
- Create conferences protected from unauthorized connections with a PIN
- Change the PIN or identifier of an ongoing conference if you are the owner
- Start meetings instantly and save their templates
- Add and remove participants while the conference is in progress
- Control participants' cameras and microphones, change devices or adjust microphone sensitivity
- Mute microphones for all participants except the selected one
- The owner can lock an ongoing conference from new participants
- Select and manage multiple conference participants
- Move participants to the waiting room to manage access to a conference
- Set mandatory registration for webinar guests
- View detailed analytics about a conference (available only to the owner)
- Highlight active speakers in the video window layout with a customizable color frame and set up microphone sensitivity level
- Conference moderators can set a mandatory video layout for all participants, as well as individual

layouts for each user, including SIP/H.323 endpoints and browsers

- Configure your own video layout
- Set video layout background
- Automatically enlarge speakers in a meeting
- Remote desktop control
- PTZ camera control: both your local camera (via UDP/RTP/Q.922/H.224/H.281 protocols) and remote cameras of other participants
- Meet both with guests and users registered on TrueConf Server
- Join conferences without signing in to the application
- Attendees can push to talk or send a request to become a speaker in role-based conferences, while moderators can appoint or remove speakers from the podium
- Switch between a smart meeting and moderated role-based mode without interrupting the conference
- Take polls or share reactions in conferences
- Show slides and images in a separate media stream to all participants, including in-browser connections and SIP/H.323 endpoints over H.239/BFCP protocols
- Share your desktop or application windows (the self-view can be displayed right next to content so that it could be visible in video recordings, streams and on the devices that do not support H.239/BFCP protocols)
- Flexible customization of the content sharing scene: background removal (only the speaker will be displayed), it is possible to select the position and size of the self-view
- Annotate over the shared screen
- Stream audio when sharing content or showing slides
- Stream video files to a conference
- Stay focused on your meeting when sharing your content or switching to other windows thanks to a customizable widget with quick conference controls
- Control how the recording of an ongoing conference will be saved on the server and download the video file when this meeting is over (available only to the owner)
- Video recording of calls and conferences (it is possible to select the video format, resolution and the folder where the file should be saved)
- Select a user (or users) who will be allowed to record you
- Built-in player for video recordings
- Full address book support (adding and deleting contacts and groups, editing contact information, searching and blocking contacts)
- Exchange messages and share files in personal and group chats. Your messages will be delivered even if your partner is currently offline
- Configuration of automatic file downloading
- Built-in tool for viewing videos, images and PDF files in a text chat
- Create group chats that can be escalated into a group conference with all chat participants in one click.
- Chat history, including group chats of the meetings that have already finished
- Appoint chat moderator
- Transfer chat ownership to another participant
- Configure display settings for chat notifications

- Show/hide previous chat history from new participants
- Disable notifications from private and group chats
- Compress images sent to a chat if necessary
- Text formatting in chats
- Ability to check which of chat participants have read your message
- Ability to share a contact in a private or group chat
- Enjoy built-in algorithms of echo/noise cancellation and automatic gain control (AGC)
- User status tracking (it is possible to enable notifications that will be displayed when certain contacts change their status to online)
- Set a virtual background (select one of the default backgrounds or add a custom one)
- Blur the background
- Use face tracking during meetings (available for one and multiple participants)
- Optional network speed limitation templates or manual settings
- Try built-in tools for testing the quality of server connection
- Change app notification settings
- Configure the main menu: choose the elements to be displayed and select how they should be displayed during calls and conferences
- A wide variety of hotkeys for managing app features (hotkeys can be remapped if necessary)
- Ability to select from multiple power-saving modes (balanced and maximum saving)

1.2. Installing the application

Before installation, make sure your computer and network connection meet our system requirements depending on the desired video quality.

To get started with TrueConf client application, download it from the guest page of your TrueConf Server instance (please contact your server administrator to find out its URL address) or from our official website:

- TrueConf for Windows
- TrueConf for macOS
- TrueConf for Linux

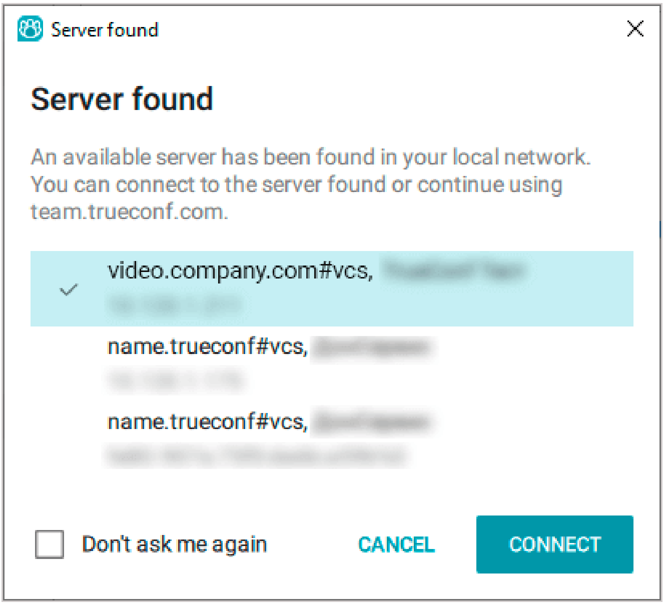
> ! Before using the client application, make sure that your operating system and graphics card driver is up to date. Please note that we recommend downloading the drivers from the manufacturer's official website (Intel , Nvidia , AMD).

1.3. Connecting the application to the server

> *i* This guide shows how to use TrueConf desktop client applications. TrueConf for Windows is taken as an example.

When TrueConf client application is launched for the first time, it will automatically detect a TrueConf Server instance in the local network and display a dialogue window for connecting to it.

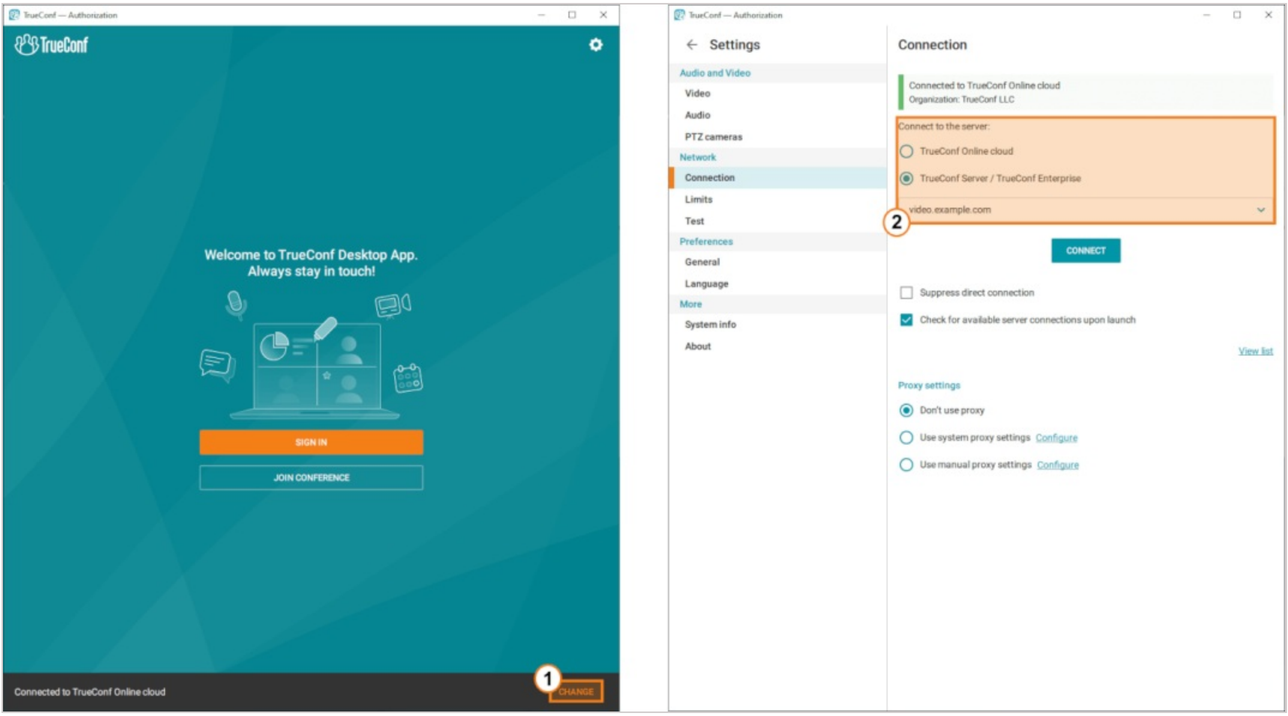
> * Only TrueConf Server 4.5 + instances can be automatically detected.



By default, the application connects to TrueConf Online cloud service.

To switch to a corporate TrueConf Server instance, click the **Change** button.

In the window that opens, switch to **TrueConf Server/ TrueConf Enterprise** in the **Connect to the server** section and enter the IP address or FQDN of your video conferencing server. Click the **Connect** button.



If connection is successful, you will see the text hint **Connected to video.company.com** in the **Network state** section in the upper part of the window.

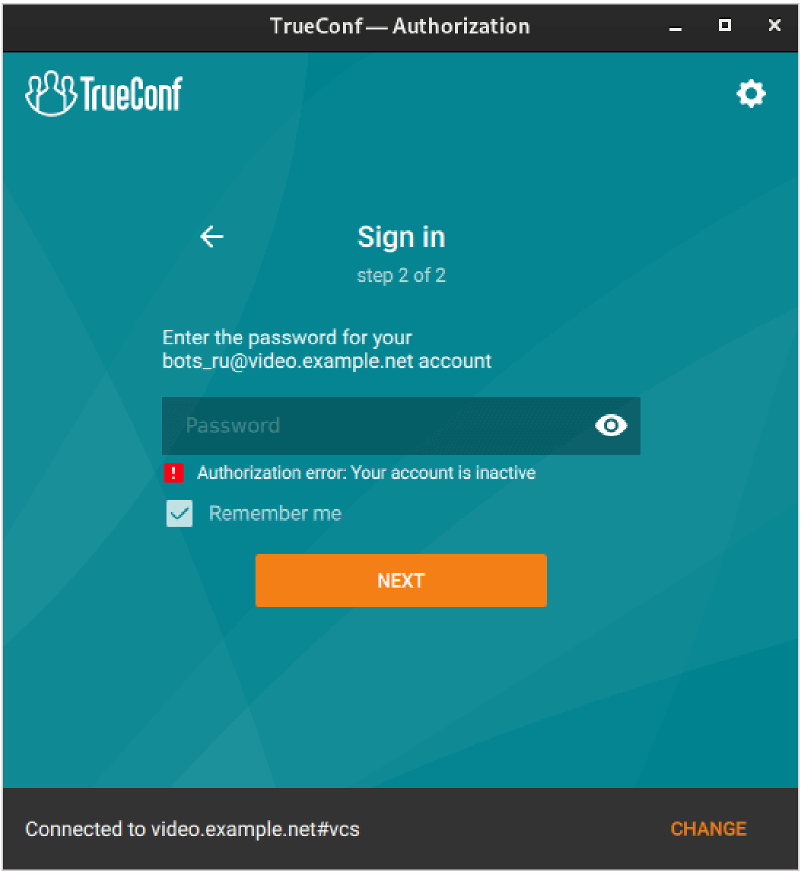
1.4. Signing in

Depending on the settings of the video conferencing server to which you will connect and your location (e.g., the corporate network or the Internet), you may have to use one of the following authorization options:

- with a login and password
- with the help of Single Sign-On (SSO) technology

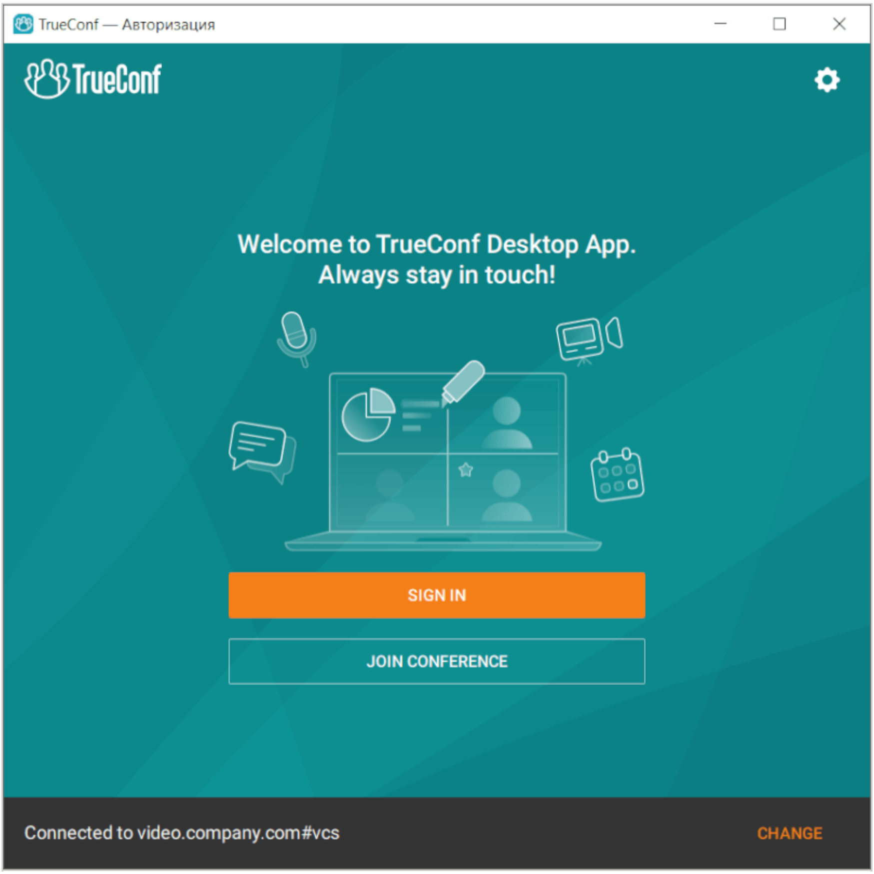
- with Active Directory Federation Services (AD FS) or another provider like Keycloak .

> *i* If a user account is disabled on the side of TrueConf Server, the authorization will not be completed, and the corresponding message will be displayed. In case of such problems, please contact your server administrator.

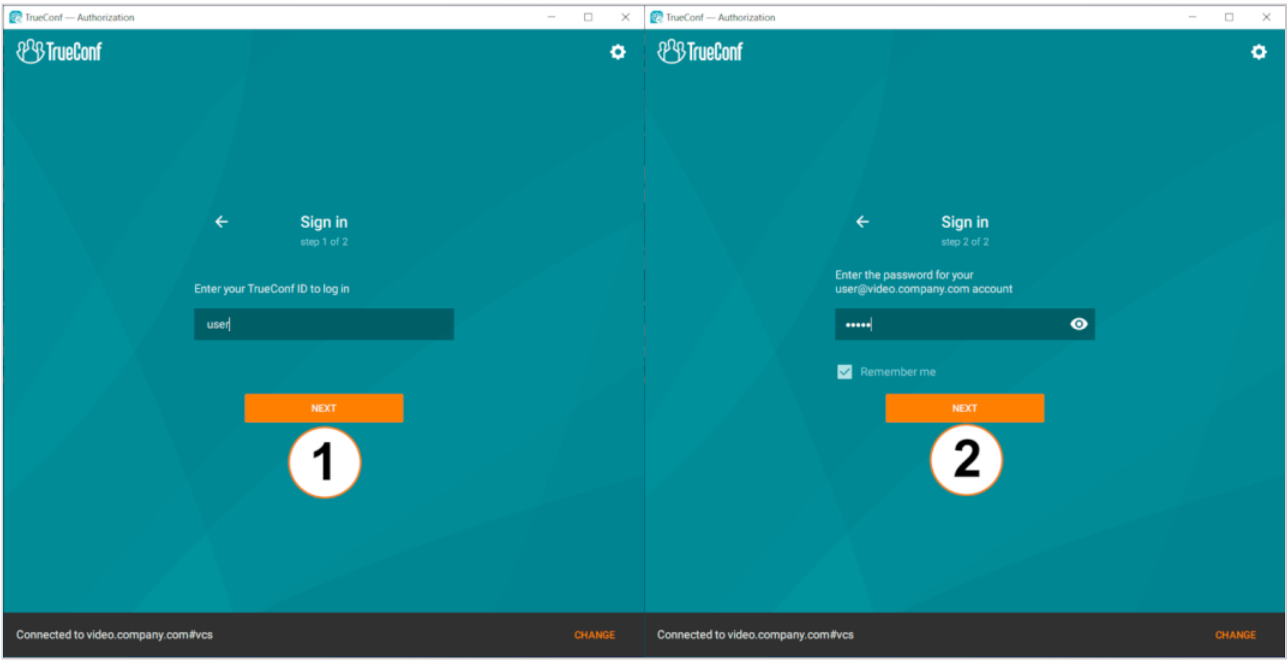


1.4.1. Authorization with login and password

Click the **Sign in** button on the home page.



In the authorization window, enter your **TrueConf ID** (username) and **Password**. If you don't know your login details, please ask your server administrator to provide you with them.



1.4.2. SSO authorization

SSO (Single Sign-On) is a technology that allows a user to sign in to multiple applications or web services with the same login information.

In this case it will enable users to sign in to TrueConf client application without entering the login and password if they have already signed in to the operating system. However, two requirements have to be met:

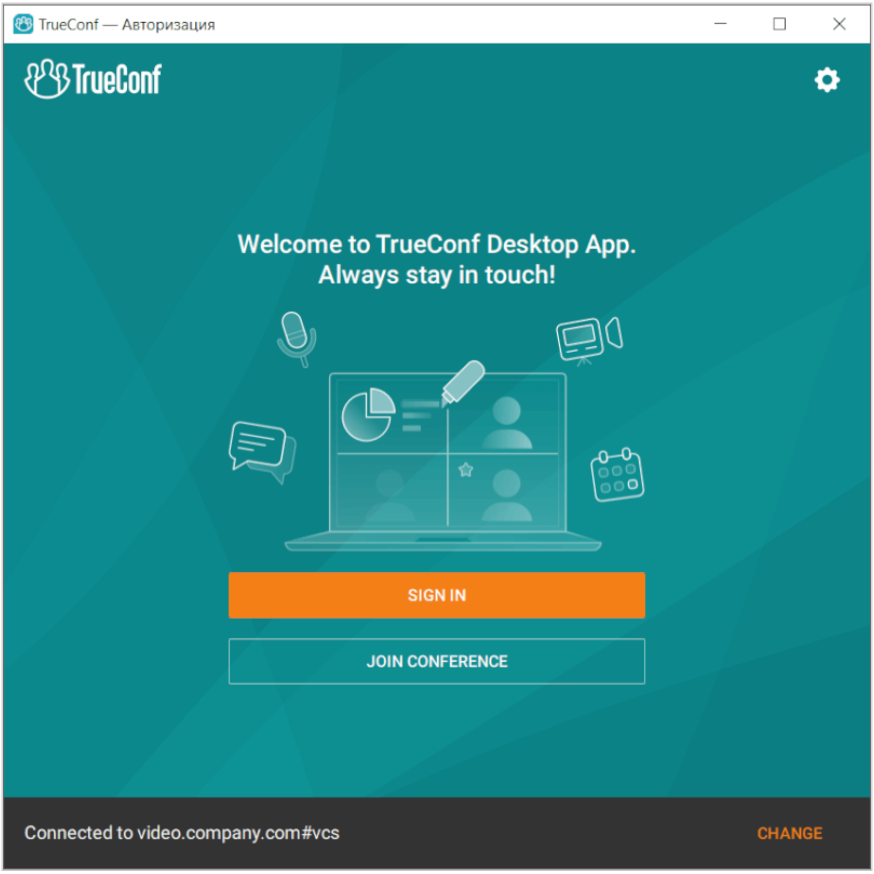
1. You will need to be authorized in the OS with the domain account (specified on the LDAP server).
2. TrueConf Server to which you are connected should be integrated with the LDAP server from part 1.

> *
> This feature is available not only on Windows (where Active Directory is used as the directory service), but also on Linux.

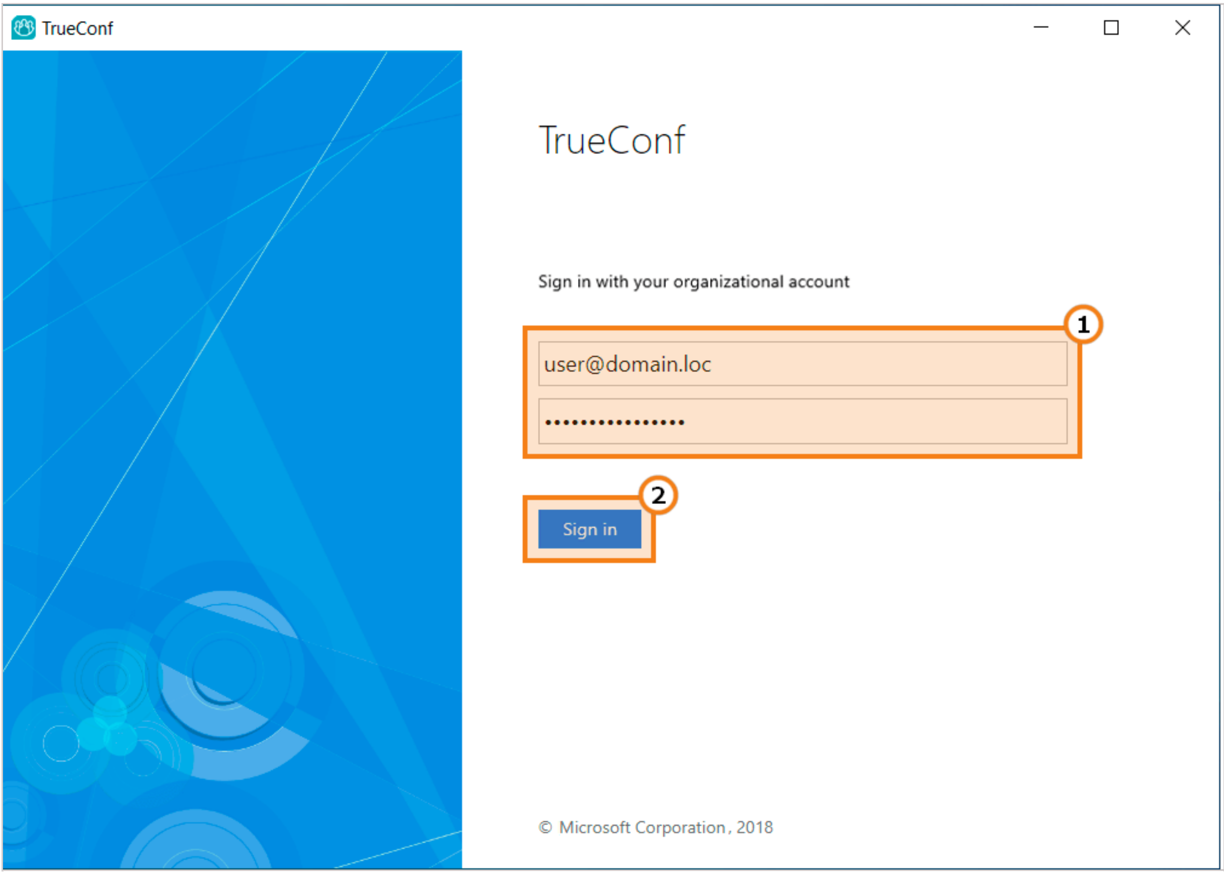
If these conditions are met, you will be automatically signed in to TrueConf application once it is started.

1.4.3. AD FS authorization

Click the **Sign in** button on the home page.

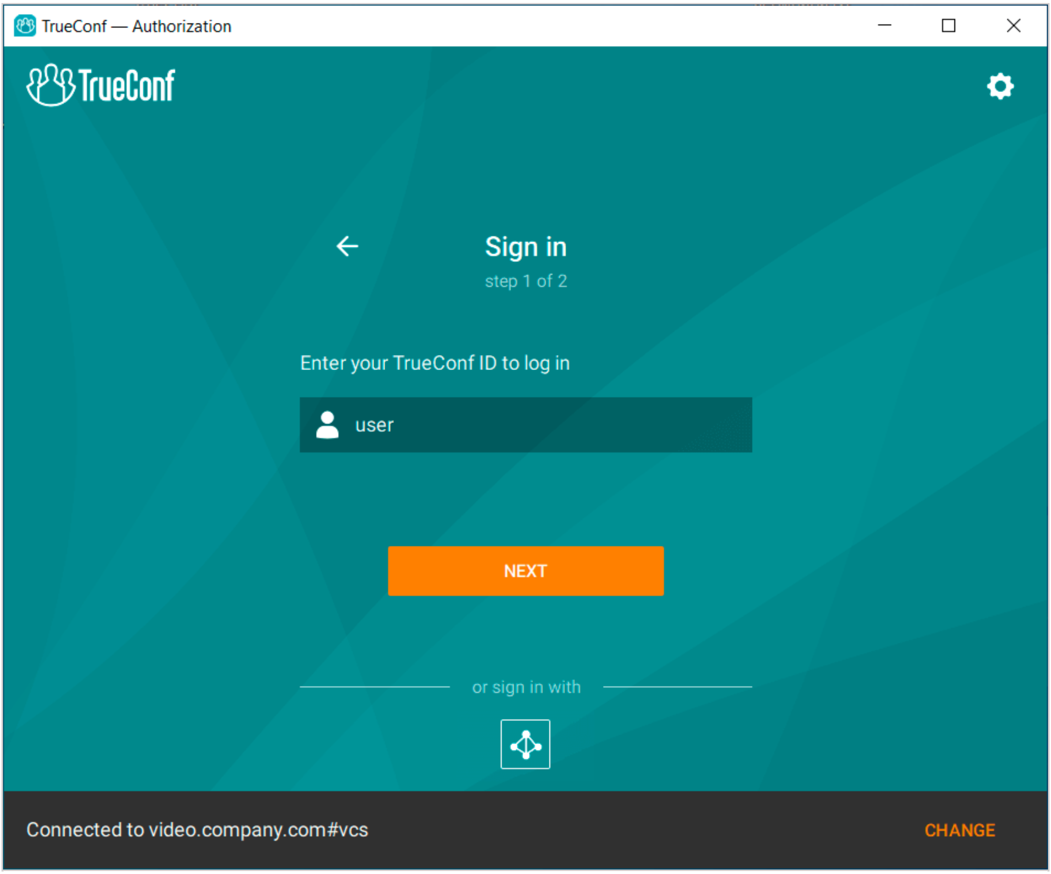


The AD FS authorization window will be displayed on the screen. Type your domain login and password (contact the server administrator to receive them). Next, click **Sign in**.



Once you have signed in, your user account information will be displayed in TrueConf client application.

If the administrator has configured authorization with login/password and AD FS on the side of your TrueConf Server, you will be offered multiple authorization options when you click **Sign in**. You will see the window for entering the login, however, in the bottom, next to the **or sign in with** block, there will be the button for authorization via AD FS.



In addition to AD FS, your company may use another provider like Keycloak for implementing two-factor authentication.

The general application login scheme described for AD FS will remain the same when using another provider.

1.5. Offline mode

You can sign in to your application and use some of its features in offline mode.

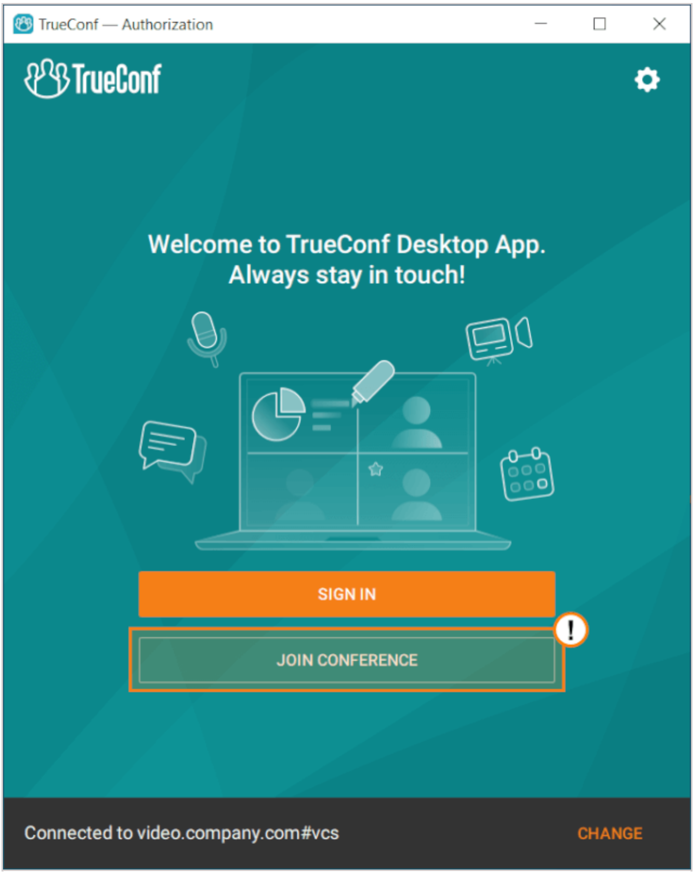
If connection to the server is lost and you have previously signed in to the client app, you will still be able to use some of its features in offline mode. For example, you can view the history of received messages or type a message that will be sent when connection is restored. When working in offline mode, you will be unable to make calls, use instant messaging, or upload and download media files.

When connection with the server is restored, you will automatically reconnect to it and be able to continue working online.

1.6. Joining a conference as a guest

You can join a conference without signing in to the client application. To do it:

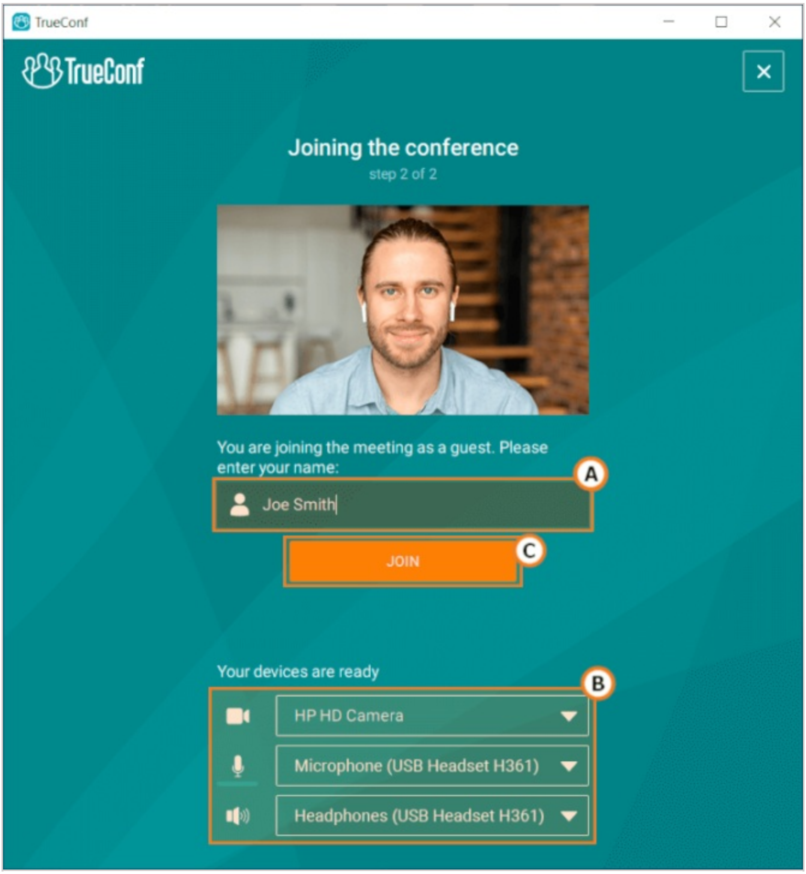
1. Click the **Join conference** button on the application home page.



2. Enter the link to a conference or its ID in the form field.

> *i* Users can join a conference by its ID only if they are already connected to the server on which this meeting will be hosted. So, connection with a link will be a more flexible solution.

3. Enter the guest name under which you will join the conference and configure your devices. Next, click **Join**.

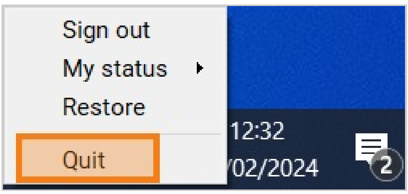


! Guest connections are available only for public conferences.

1.7. Exiting the application

By default, (exit button) minimizes the application to tray. You also can change this button action in **Settings →Preferences →General**. To exit the application, you need to:

1. Right-click on the application icon in the tray (lower right corner on the screen)
2. Select **Exit**.



1.8. User roles

All TrueConf users can be divided into the following categories:

- **User** – a user account registered on TrueConf Server. Please note that a conference can be created only by users authorized in the client application or in the personal area.
- **Guest** – an unauthorized user who joins a TrueConf meeting. Guest access is supported only in public web conferences (webinars). Guest can be assigned with a moderator or speaker role. These roles are described below. О том как подключиться к конференции в качестве гостя рассказано в соответствующем разделе.
- **SIP, H.323 and RTSP devices** – SIP/H.323 endpoints that participate in a meeting (but are not registered

on TrueConf Server), and RTSP streams (for instance, for IP camera broadcasting).

1.8.1. User roles in video conferences

All users and guests (for public meetings) who participate in a TrueConf conference are called **participants**. They can take part in a conference and at the same time communicate with each other via chat, reactions and audio remarks (in moderated role-based conferences). Every participant is publicly displayed in the list of participants and cannot be hidden. Conference participants can be assigned with the following privileges.

- **Moderator** is the participant who can manage the conference. This person can:
    - invite users to a video conference
    - remove participants from the event
    - invite participants to the podium during a moderated role-based conference
    - pin participants on the podium during a smart meeting
    - control the devices of any meeting participant
    - change the layout
    - select an audio track for participants in a conference with simultaneous interpretation
    - set PIN and ID for an ongoing conference
    - lock an ongoing conference for new participants
    - end the conference.

Unlike the **owner**, there can be multiple moderators in a TrueConf conference. They can be appointed by the conference owner or any moderator.

A guest or a participant from a federated TrueConf Server can also be appointed as moderator.

- **Owner** is the user who created a conference, or who was appointed as the owner by administrator when creating or editing a new conference. When the owner joins the conference, this user automatically get the following rights:
    - All of the moderator rights described above
    - Ability to view the conference analytics
    - Ability to control how the video recording of a conference will be saved on the server.
    - Ability to download the video recordings of the event saved on the server.

  A moderator cannot remove the owner from the conference.

- **Operator** – the user who gets conference **moderator** privileges in any meeting hosted on their TrueConf Server instance. This role can be useful when an experienced user is required to help organize the conference.

  In addition to the moderator rights, the operator can:
    - join any conference protected by PIN without having to enter it
    - join locked conferences.

  Unlike the moderator rights, the rights of an operator cannot be transferred via federation. It means that if you are an operator on your TrueConf Server, you will not become an operator when joining a conference hosted on a different server (with a different address).

- **Speaker** – an active participant of the conference who has the right to present during the meeting.

  The speaker rights can be given to different participants depending on the conference mode:
    - In all-on-screen mode each participant is a speaker.

- In video lecture mode there can be only one speaker (teacher) who can be seen and heard by other participants (students). However, you can add another speaker by promoting a participant to the role of a moderator. This participant will also be displayed in the layout.
- In moderated role-based mode any participant can become a speaker by sending a corresponding request to the conference owner or moderator. The moderator can also invite a participant to the podium. The maximum number of speakers on the podium can be set when creating a conference.
- In smart meeting mode, any participant can become a speaker if his/her voice activity is detected or if this user starts sharing content. In this case, the participant who keeps silent longer than others or started content sharing earlier (when the microphone is muted) will be removed from the video layout. The number of “spots” available on the podium is limited and can be set when the conference is created. The moderator can “pin” any participant on the podium to make sure that this participant is not accidentally removed from the layout even if he/she keeps silent.

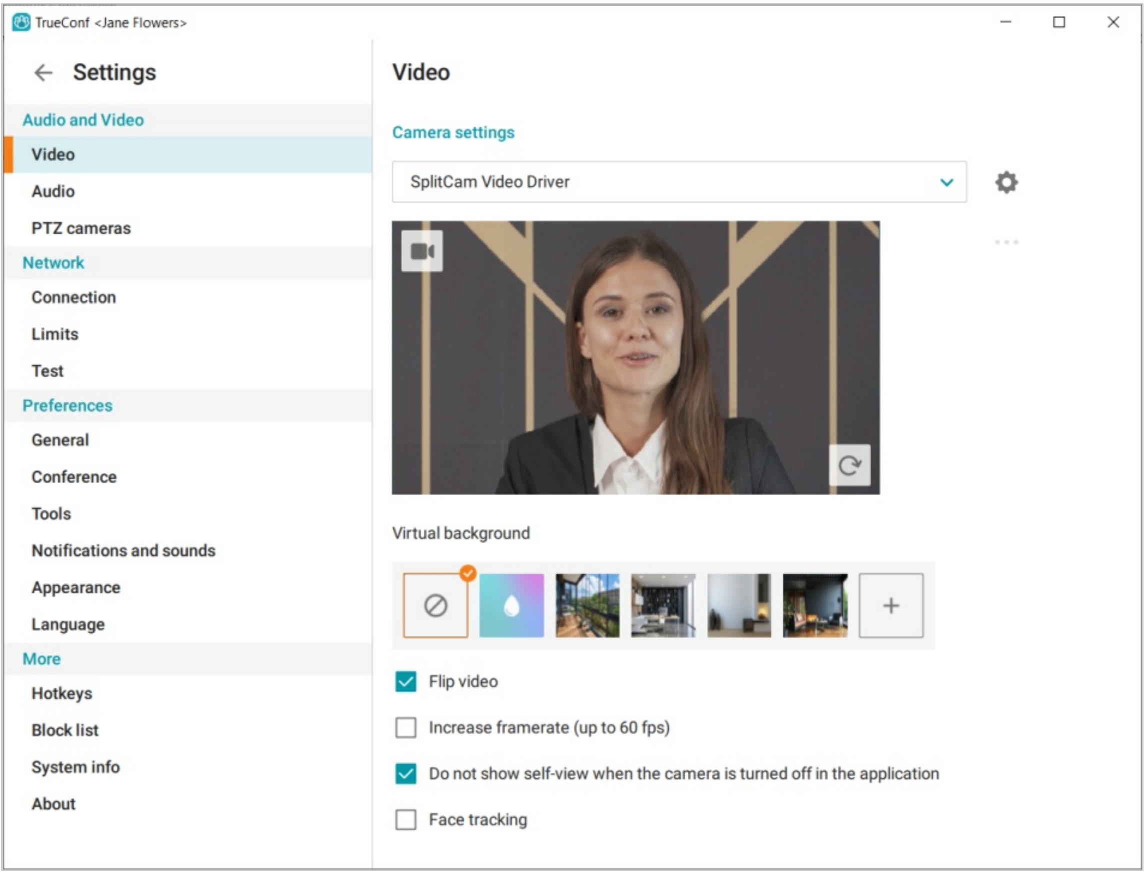
- **Interpreter** is an active conference participant who is allowed to translate the presentation of other speakers simultaneously. This person is not visible to other conference participants and can select a language for translation from the language pair assigned to him/her (for example, English-Spanish). All attendees who have chosen the language being translated can hear the interpreter.

> *i* Please note that to appoint interpreters, you have to activate the simultaneous interpretation feature in advance when creating a conference.

2. Audio and video settings

2.1. Video

In the application window, go to the **Settings** menu by clicking on the button. Next, select the camera in the **Video** subsection of **Audio and Video**.



If the **Face tracking** feature is enabled, the built-in AI module will crop the video so that your face would always remain in the center while the background on both sides would be mostly cut out. The resulting frame will be scaled to fit the available video area. If there are two or more persons in the frame, the video will be adjusted to fit all of them. Your face will be tracked even when you are moving.

> *i* **Face tracking** is available for the cameras with the resolution 1280x720 (720p) or above.

2.1.1. Background blurring

TrueConf provides background blurring feature. It is available for any computer that meets the general system requirements and can be used for both one-on-one video calls and group video conferences.

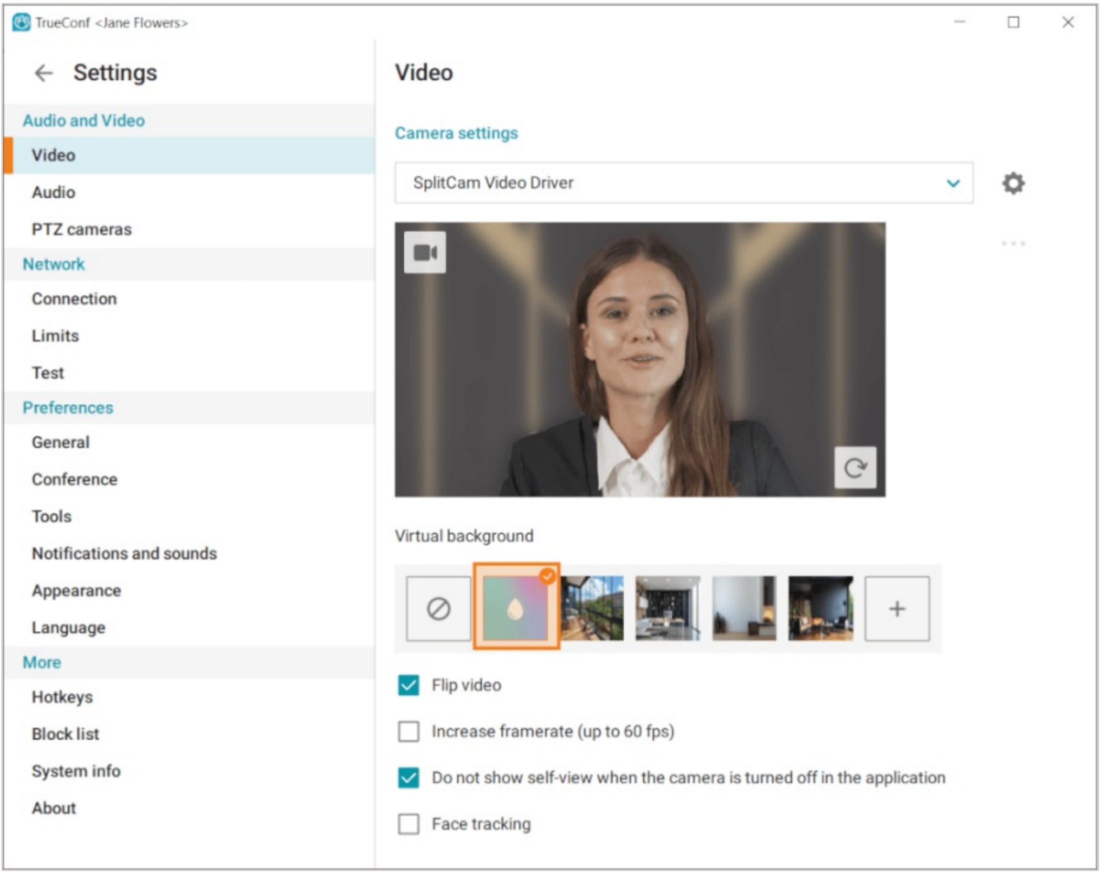
The blurred background feature can be useful in a slew of situations, e.g., if you need to focus on the task at hand during meetings. Even if you don't work remotely, office distractions can be a problem.

Besides, this feature will be useful in case of remote learning, as the children's room may look unsuitable due to the clutter or bright posters. By blurring the background, they will feel more comfortable at the meetings.

> *i* The background blurring feature may be unavailable if your system does not meet the required performance parameters or is overloaded with CPU consuming processes.

To blur the background, take the following steps:

1. Go to the **Settings →Audio and Video →Video** section.
2. Click on the button. You will immediately see the result in the preview window.

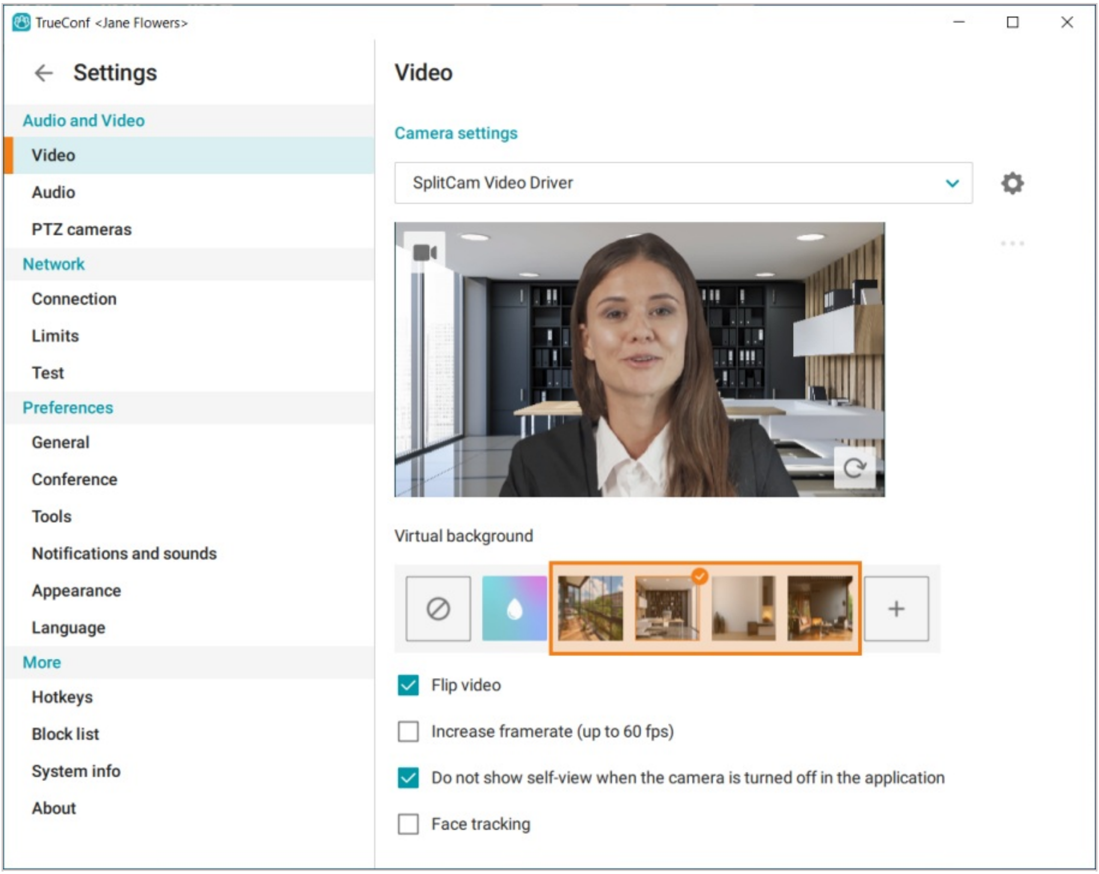


To disable background blurring, click on the ⊘ button.

2.1.2. Virtual background

If you want to hide your background, you can replace it with a virtual one. To do it, go to the **Settings → Audio and Video →Video** section and select any of the default images in the **Virtual background** sub-section.

> * In addition to using a virtual background, users can also blur their real background. Check the corresponding sub-section for more details.

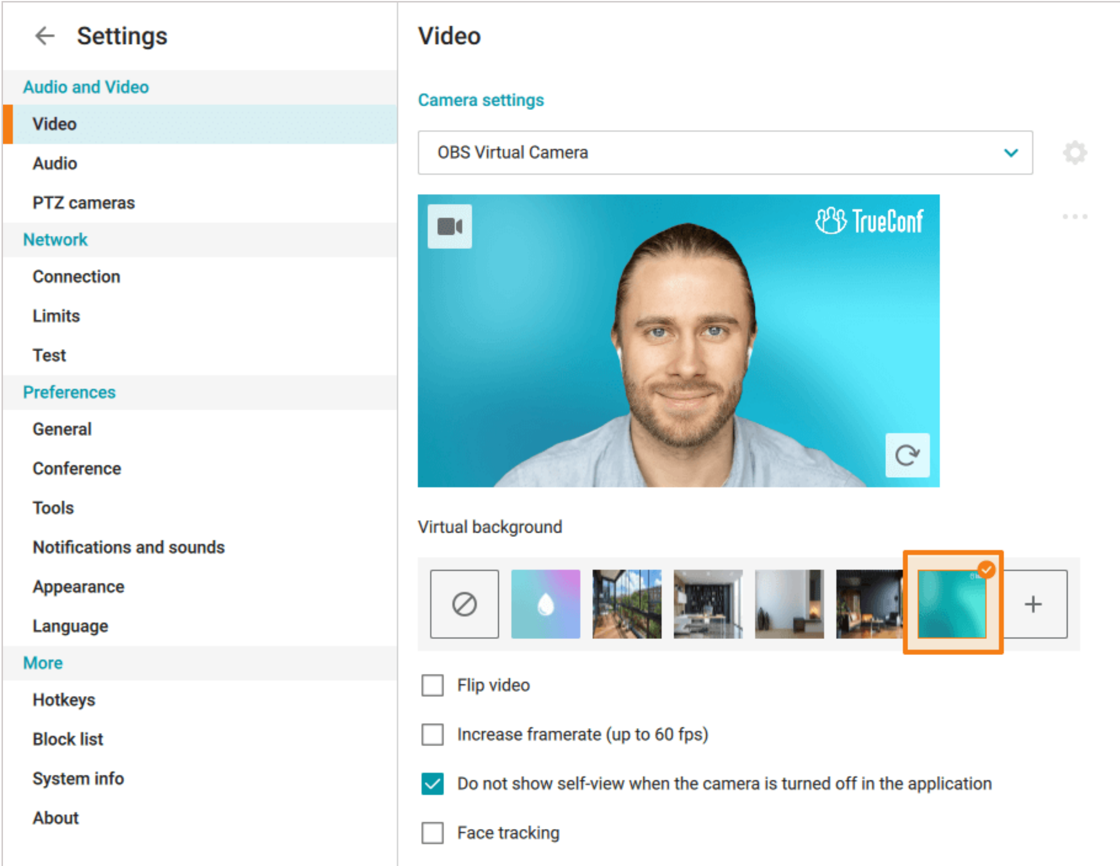


If none of the default images suits you, it is possible to upload a custom image. In order to do it:

1. Click on the + button in the **Virtual background** section.
2. Select the required image in your OS file manager (supported formats are **.jpg, .png, .svg, .jpeg, .png, .gif, .jpe, .jif, .jfif, .jfi, .bmp, .png, .gif, .webp**).

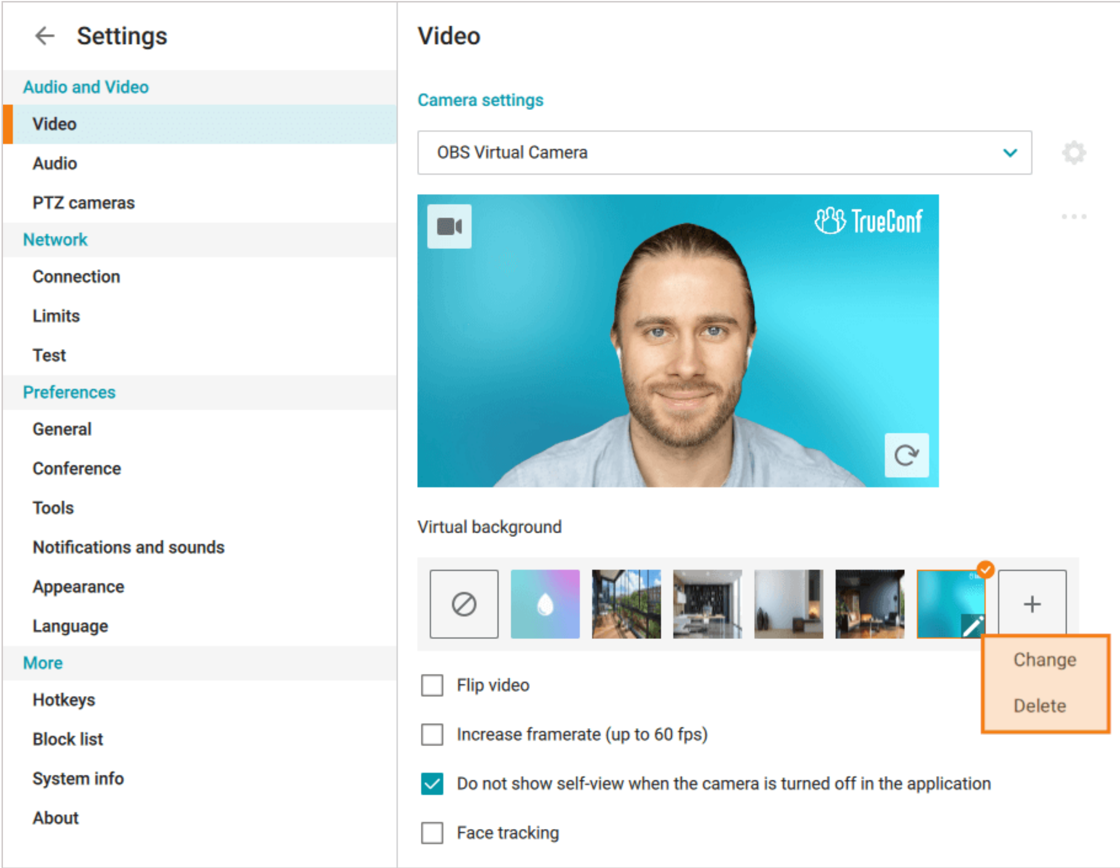
If the **.gif** format is used as a background, only the first frame will be used, but not the entire animation.

1. The image that has been added will be displayed in the list and you will be able to set it as a virtual background.



When a virtual background has been added, you can change or delete it. In order to do it:

1. Hover the mouse cursor over the image added to the list of virtual backgrounds.
2. Click on the  button that will pop up.
3. A context menu will be opened; here you will be able to change the image **Change** or delete it **Delete**.



To disable the virtual background, click on the ⊘ button.

2.2. Audio

To adjust settings for audio devices, go to the **Audio** subsection of **Audio and Video**. Here, you will be able to select playback and recording devices and set their volume level. Please note that you will be able to select different devices for notification sounds and conference audio.

Additional settings are available in the **Recording device** section (below the menu for selecting the microphone):

- **Echo cancellation**
- **Automatic gain control**.
- **Noise suppression**
- **Enable diagnostics audio dump** which may be helpful when sending log files to our technical support.

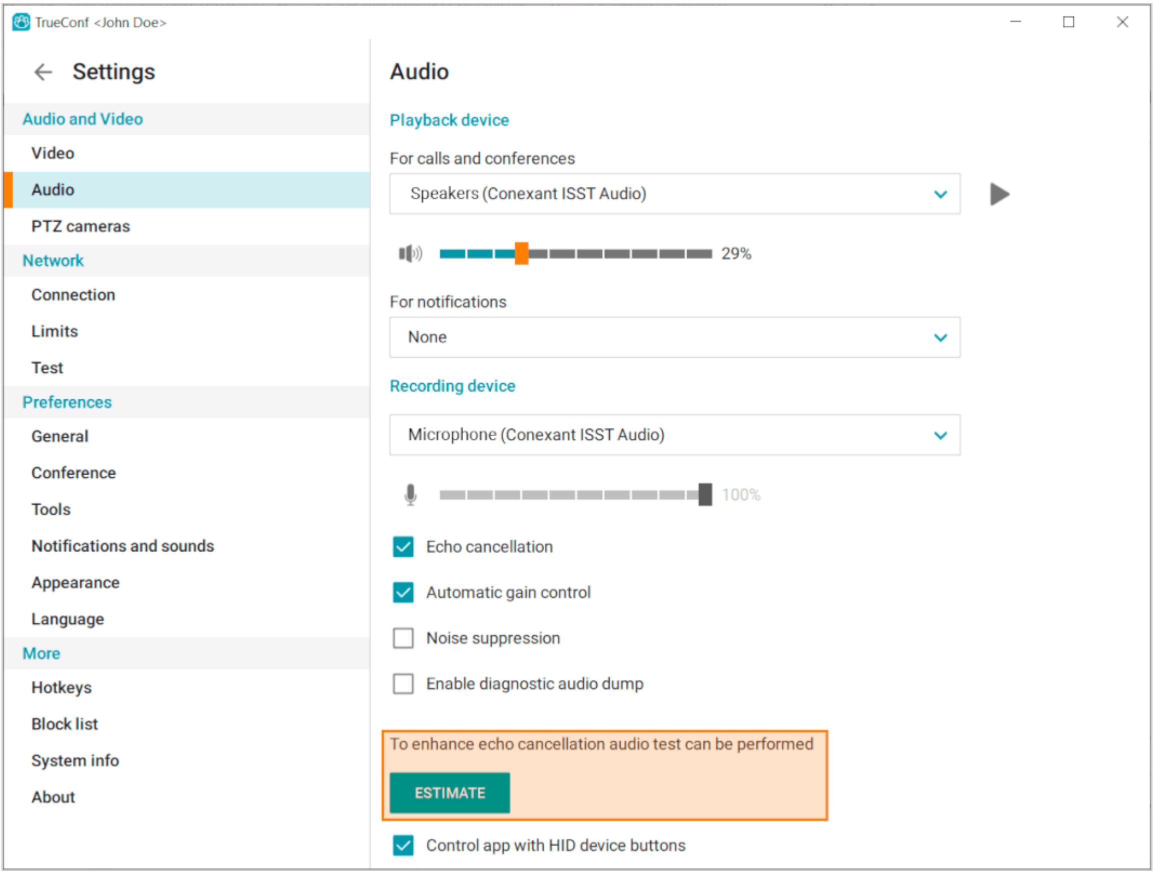
> *i* Audio dump files like other application log files are not deleted automatically, So, if the box **Enable diagnostics audio dump** is checked, the folder with audio dumps will grow in size in the long term.

These options are automatically enabled, and they are helpful in most cases. However, if you use a recording device with integrated echo cancellation/AGC mechanisms, we recommend disabling these options in the application to avoid conflicts between algorithms.

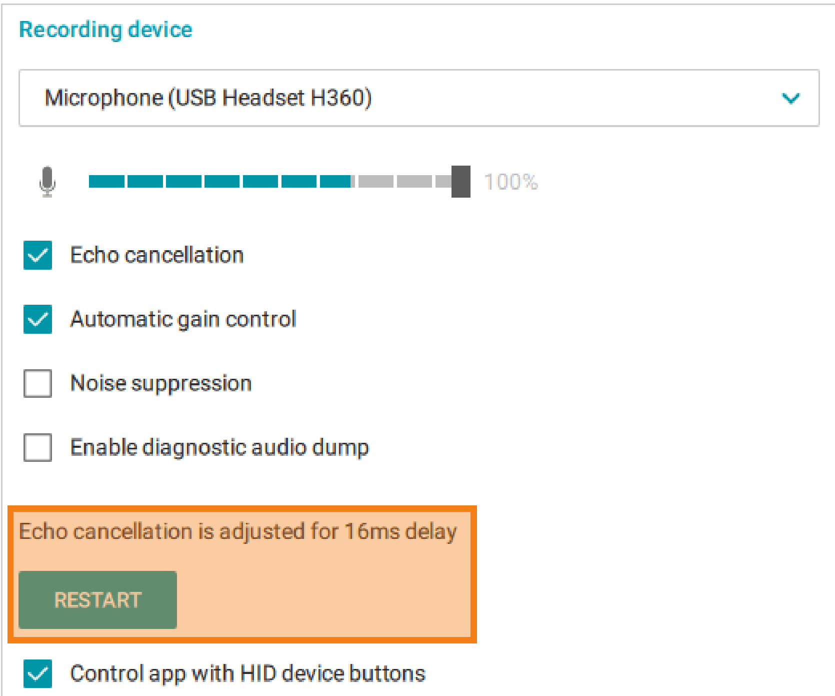
The **Noise suppression** checkbox activates the work of an AI-based mechanism that will suppress all external sounds except your voice.

> The **Noise suppression** feature has several modes, the mode will be selected automatically depending on the performance of the user's device.

For the echo cancellation algorithm to work properly, you can run an audio test and identify a possible delay. To do this, click **Estimate** at the bottom of the window.



During the testing, you will hear several audio signals from the selected playback device. When the test is successfully completed, the time of delay will be displayed.

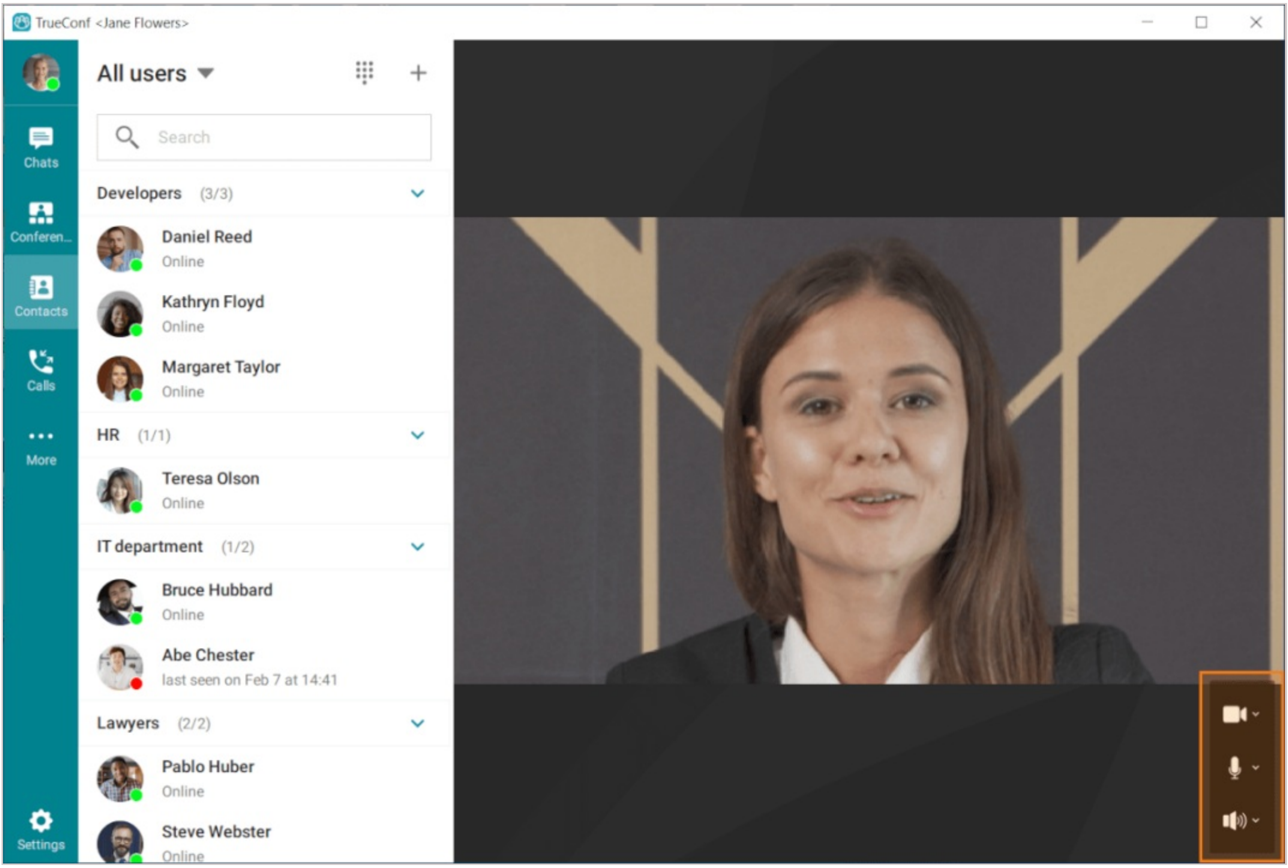


You can run the audio test again by clicking the **Restart** button, which will replace the **Estimate** button after the first successful testing.

The **Control app with HID device buttons** checkbox allows users to control the application with the hardware buttons on a speakerphone or headset.

2.3. Quick audio and video settings

You can also configure video devices in the **Contacts** section (where the video from your camera is displayed). The settings menu can be found in the lower right corner of your video area.

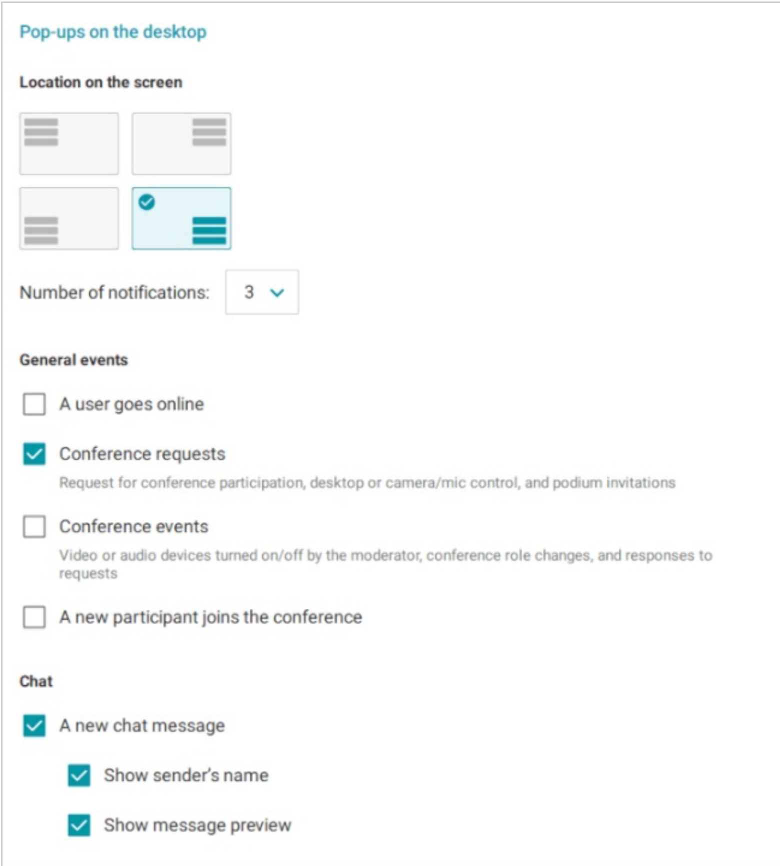


3. Application settings

3.1. Notifications

To adjust app notification settings, go to the **Preferences** section on the **Notifications and sounds** tab. Here, you will be able to set the following parameters:

1. For pop-up windows on your desktop: their location, number, and tracked events:



2. Display of notifications about events in the **Pop-ups in the application** section:
3. Audio notifications about various events (calls, conference events, and so forth) in the **Sound notifications** section. It is also possible to change the default sounds in the corresponding drop-down lists.

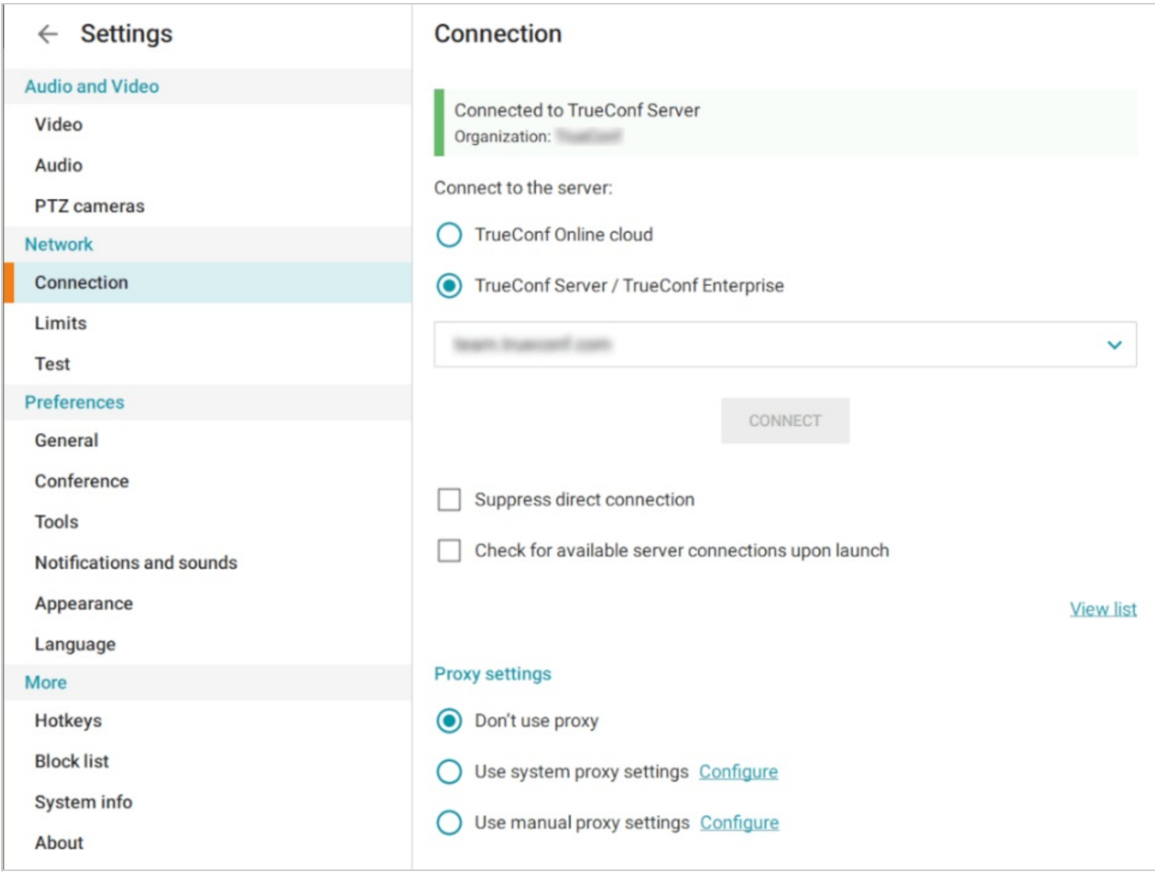
> Regardless of selected settings, you do not need to worry that chat notifications will interfere with your desktop sharing. All notifications are automatically hidden from stream viewers while remaining visible to you.

3.2. Connecting the application to the server

In the **Settings →Network →Connection** section, you can connect to your TrueConf Server instance or TrueConf Online cloud-based service.

If the **Suppress direct connection** box (disabled by default) is checked, point-to-point video calls will be routed through the server.

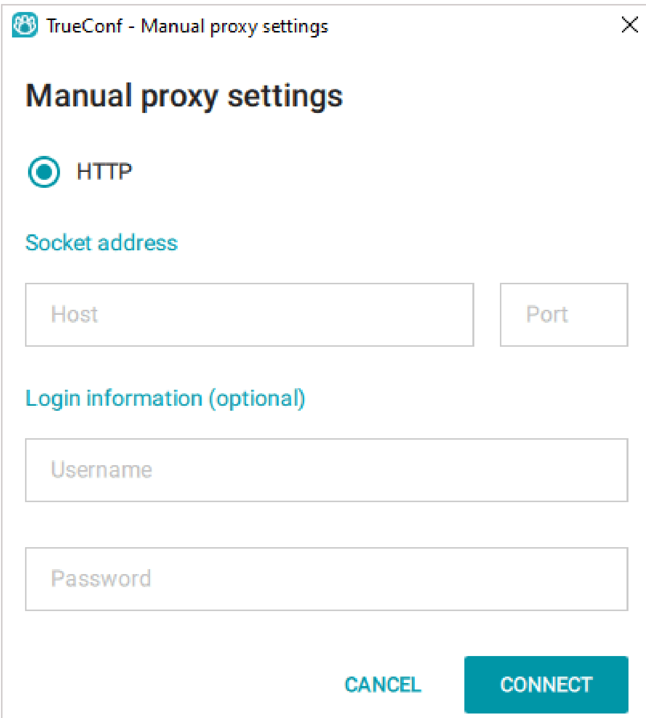
To check the list of available servers, click **View list**.



In this menu, you will also find **Proxy settings**.

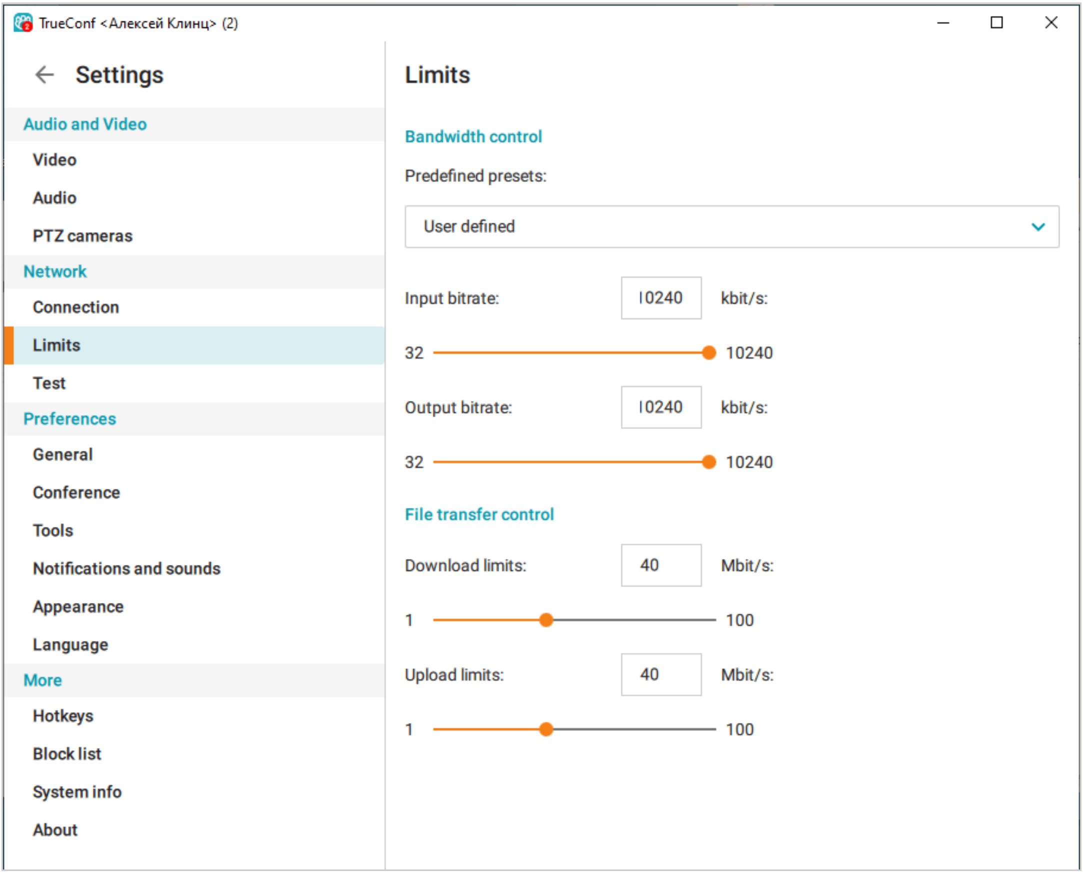
If you select the **Use system proxy settings** option and click **Configure**, you will be redirected to proxy settings in your operating system.

When you click the **Configure** link in the **Use manual proxy settings** section, a window will pop-up for you to enter all the necessary data.

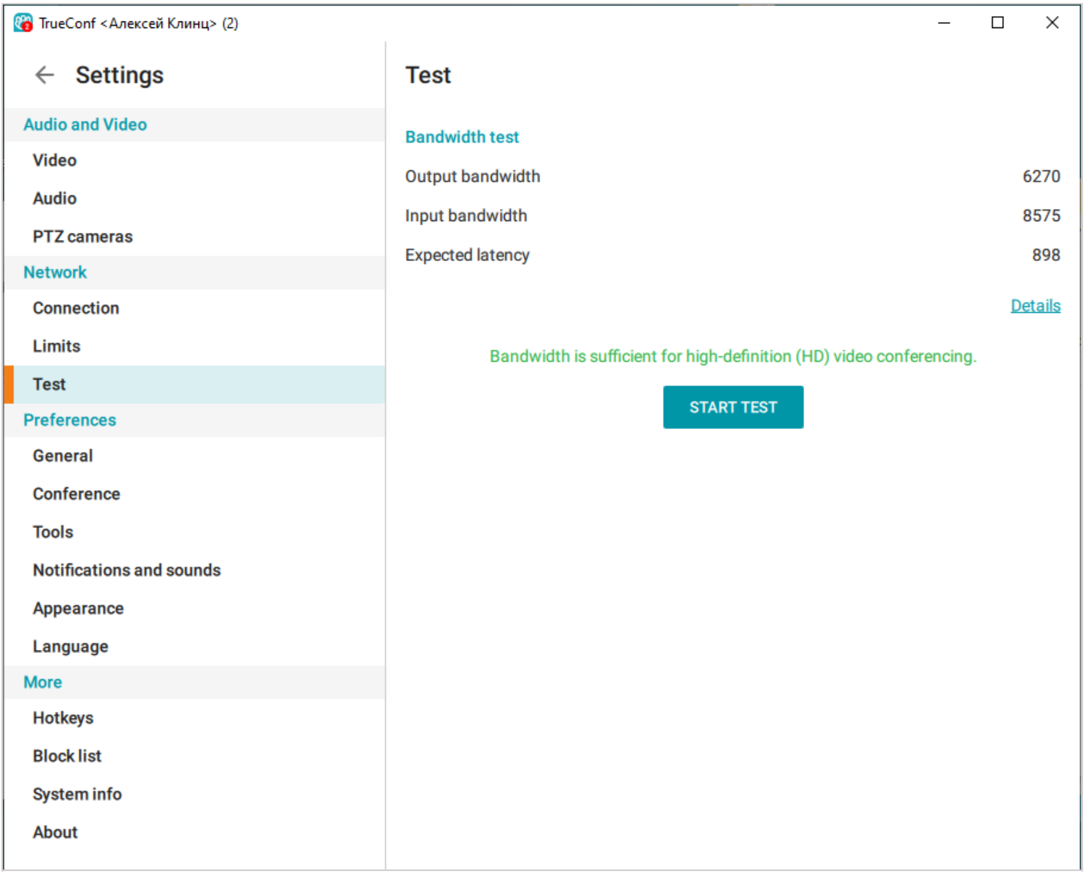


3.3. Flexible settings of connection speed

If the communication channel with TrueConf Server and the network equipment allow, you can manually increase the incoming and outgoing bitrate in the **Settings** → **Network** → **Limitations** section of the client application. In this way, you can solve problems with video quality during conferences. These settings limit each incoming/outgoing stream, but not the overall bandwidth for the conference.



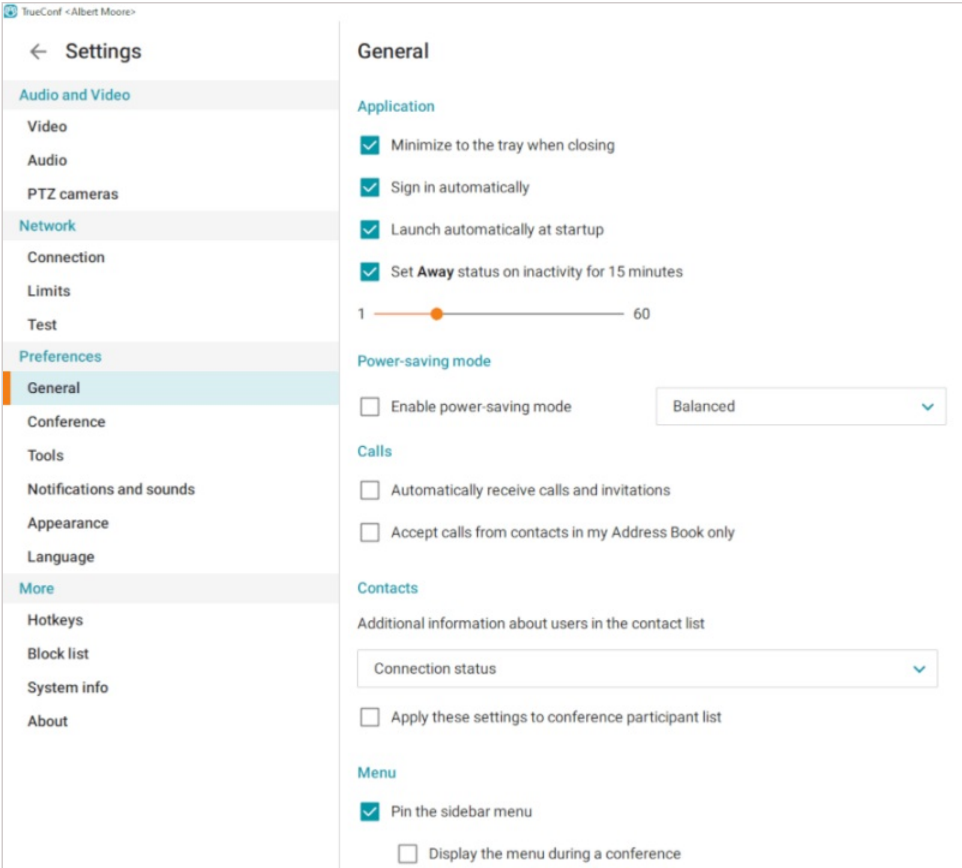
You can check the available connection speed based on the results of the communication channel test in the **Settings** → **Network** → **Test** section.



This test simulates real-time network load, and its results can indicate the actual speed and latency between the server and the client application. These figures may differ significantly from those claimed by your Internet provider. The recommended latency is up to 1000 ms; if higher, meeting participants will notice it.

3.4. General preferences

In **Settings →Preferences →General** you can allow the application to launch automatically at your operating system startup (disabled by default).

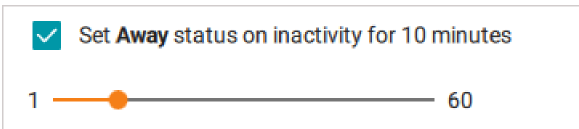


The **Sign in automatically** checkbox (enabled by default) allows you to connect to the server automatically, without entering your login and password manually each time. The application will store login details for different servers and automatically sign in when you connect to one of them.

> **!** If you want to connect to a different server, go to the **Settings →Network →Connection** menu, enter your server address in the **Connect to the server** section and press **Connect**. Please ***don't sign out*** from the account on your current server using **My profile →Sign out** menu. Otherwise you will not be able to sign in automatically the next time you connect to this server.

If the user is inactive for a certain time, **Away** status is set automatically (*in 15 minutes* by default).

To change this setting, drag the slider to set your value (from 1 to 60 minutes).

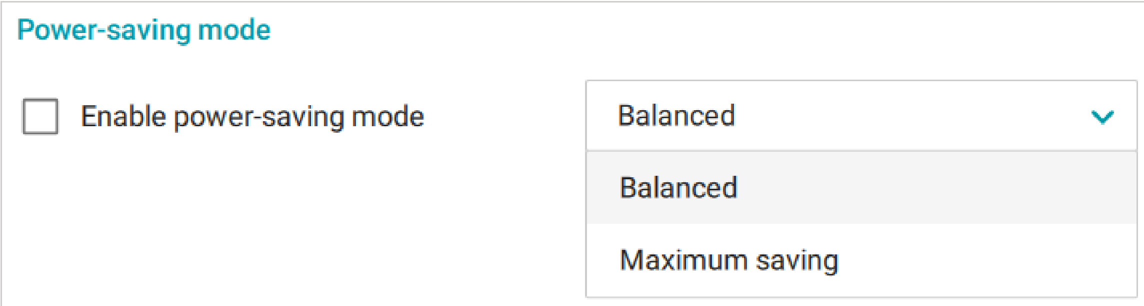


> *i* Uncheck the box **Set Away status...** if you do not want the application to record your activity.

In the **Contacts** section, you can select the line that will be displayed below users' names in the list of contacts. The possible options include: **TrueConf ID**, **Connection status**, and **Additional status**.

3.4.1. Power-saving settings

In the main preferences section, you can also manually manage power-saving settings on your device. Please note that automatic switching of application features based on load and battery status is also supported on macOS .



To activate this feature, check the box **Enable power-saving mode**.

Select the **Balanced** or **Maximum saving** power mode.

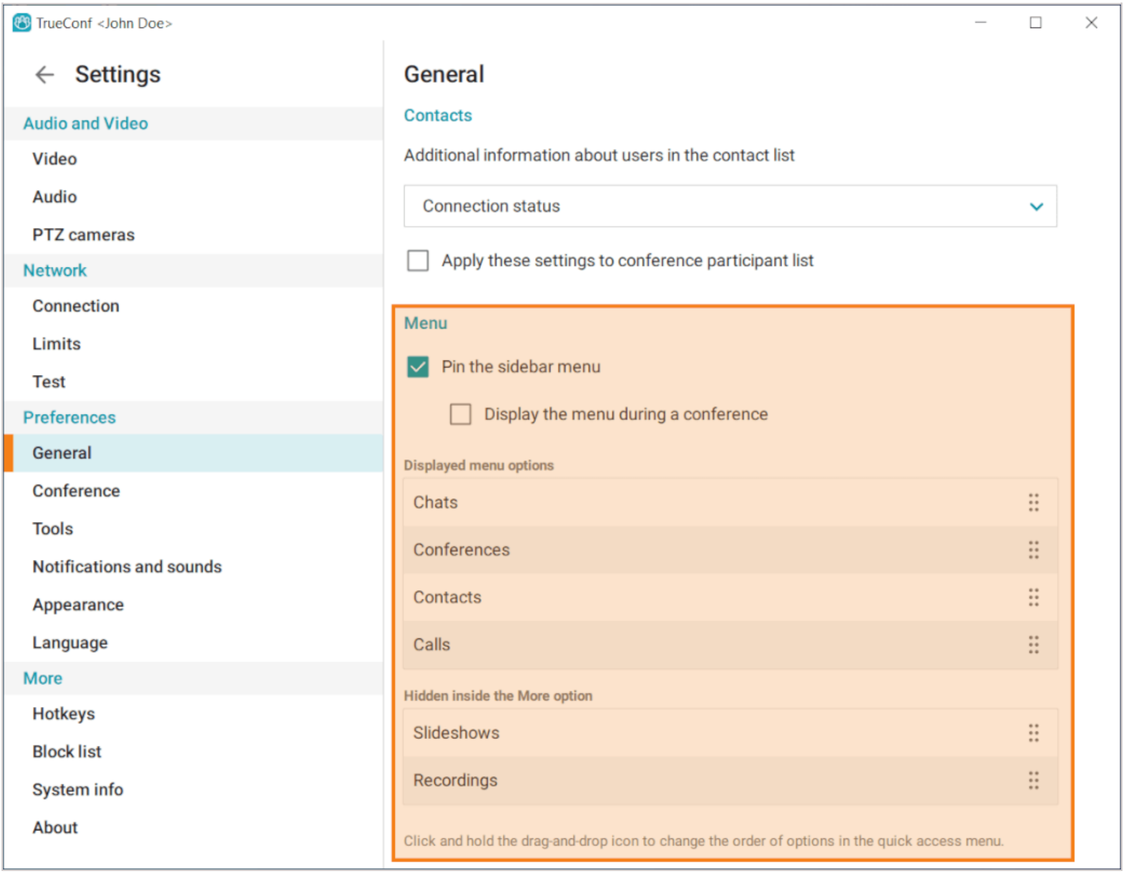
About power-saving modes:

Balanced – disables certain features in the TrueConf client application, especially those ones related to the use of AI (such as background blurring and replacement). When these features are used, the quality of transmitted video will be reduced to decrease power use.

Maximum saving – the device web camera is disabled in addition to the restrictions imposed in **Balanced** mode.

3.4.2. Settings of the main menu panel

In the **Settings →General →Menu** section, you can customize the main application menu.

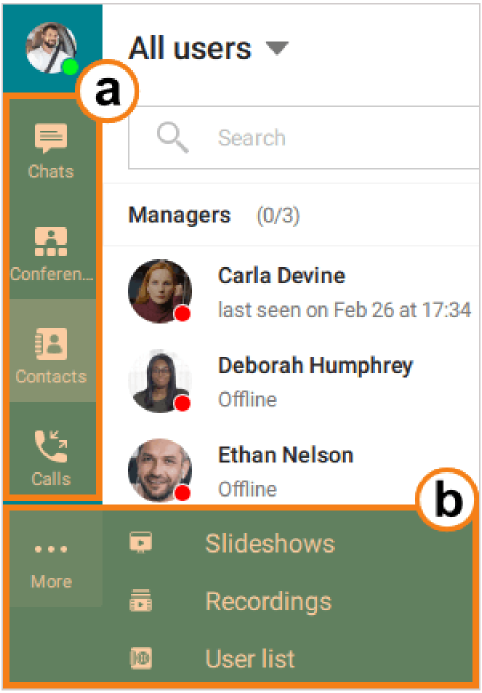


To make sure that the main menu is always displayed in the left part of the application window (except when you are in a meeting or have accessed the settings menu), check the box **Pin the sidebar menu** (checked by default). If the box is unchecked, the menu will be hidden under the button ☰ .

If you want the menu to be displayed during meetings as well, check the box **Display the menu during a conference**.

In this section you can also change the order of options that are constantly available in the main menu. It is possible to hide additional options by moving them in the **Hidden inside the More option** list. To move an option to the required location, click and hold on the button ⠿ which is opposite to the option name and drag it.

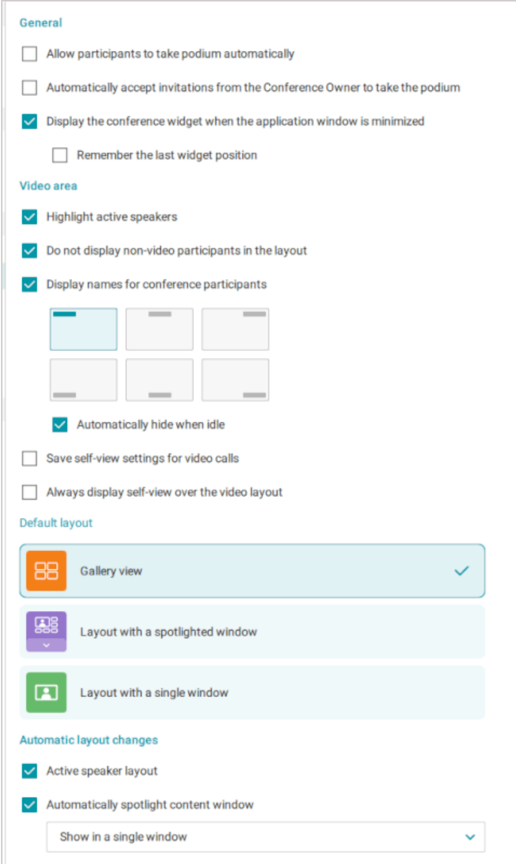
Then the options from the **Displayed menu options** block will be always displayed in the main menu, while the options from the **Hidden inside the More option** block can be found in the drop-down list that can be opened by clicking on the **More** button.



If the box **Pin the sidebar menu** is unchecked, the menu will include the options from both sections. However, the options from the **Others** block will be displayed below others under the separator bar.

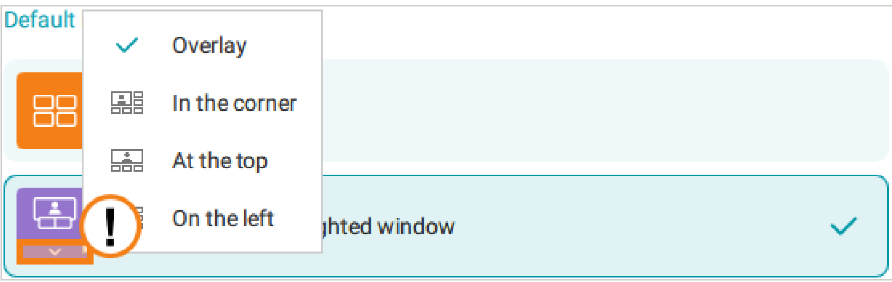
3.5. Conferences

Go to the **Settings →Preferences →Conference** section to configure conference and call settings:



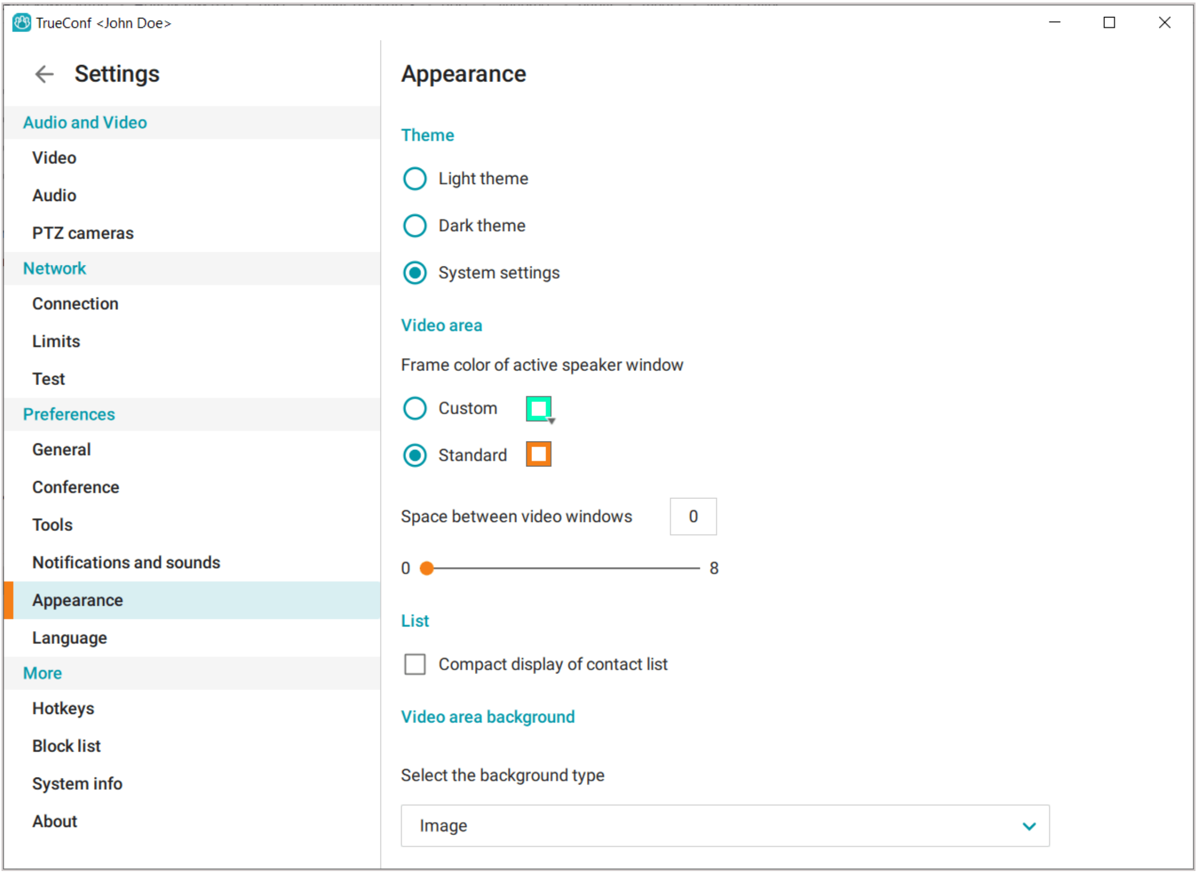
In this section you can also find the following settings:

- Automatically accept podium requests from attendees in any of the conferences where you are a moderator (or the owner)
- Automatically accepts podium invitations
- Display the conference widget (the app can remember the last position of this widget on the screen)
- Spotlight the active speaker's video window
- Automatically remove non-video participants from the conference layout
- Set the rules for displaying participants' names in the video layout (it will be possible to choose the position of the name in the window)
- Save the display settings of the self-view: when you change the position and size of the self-view, the application will remember and apply these values for all calls and conferences. By default, your self-view is displayed in the bottom left corner.
- Display the self-view video window over the layout – if this checkbox is marked, your self-view video will be displayed in a separate layout (this does not affect the layout received from the moderator)
- Select the default video layout that will be displayed to you during conferences. The **Layout with a spotlighted video** option also includes additional settings for displaying the spotlighted window and other video windows.

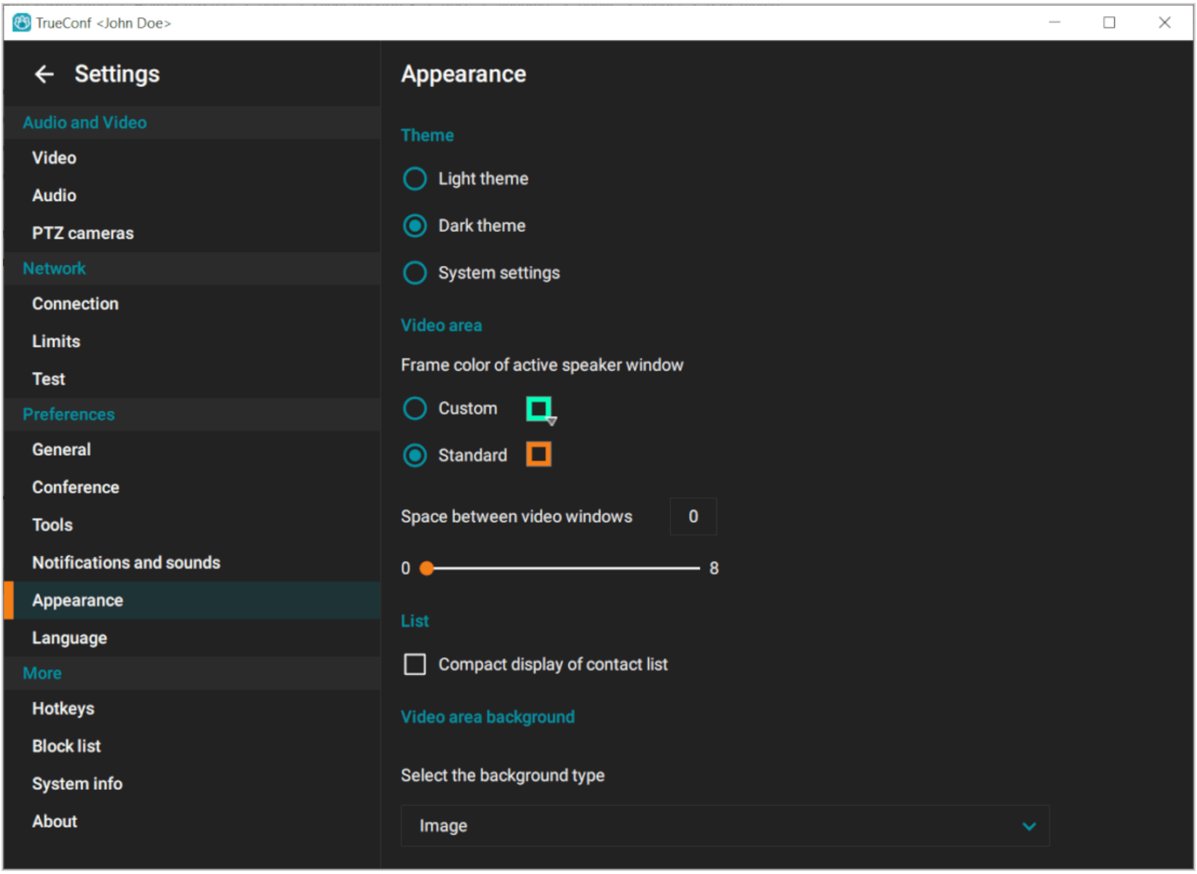


3.6. Visual styles

Go to **Settings →Preferences →Visual styles** to configure the look of your application.

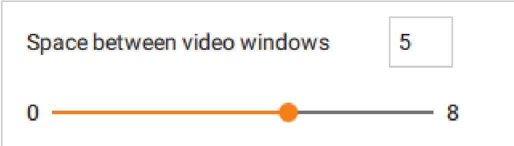


Choose the **Dark theme** option to switch the application to dark mode.

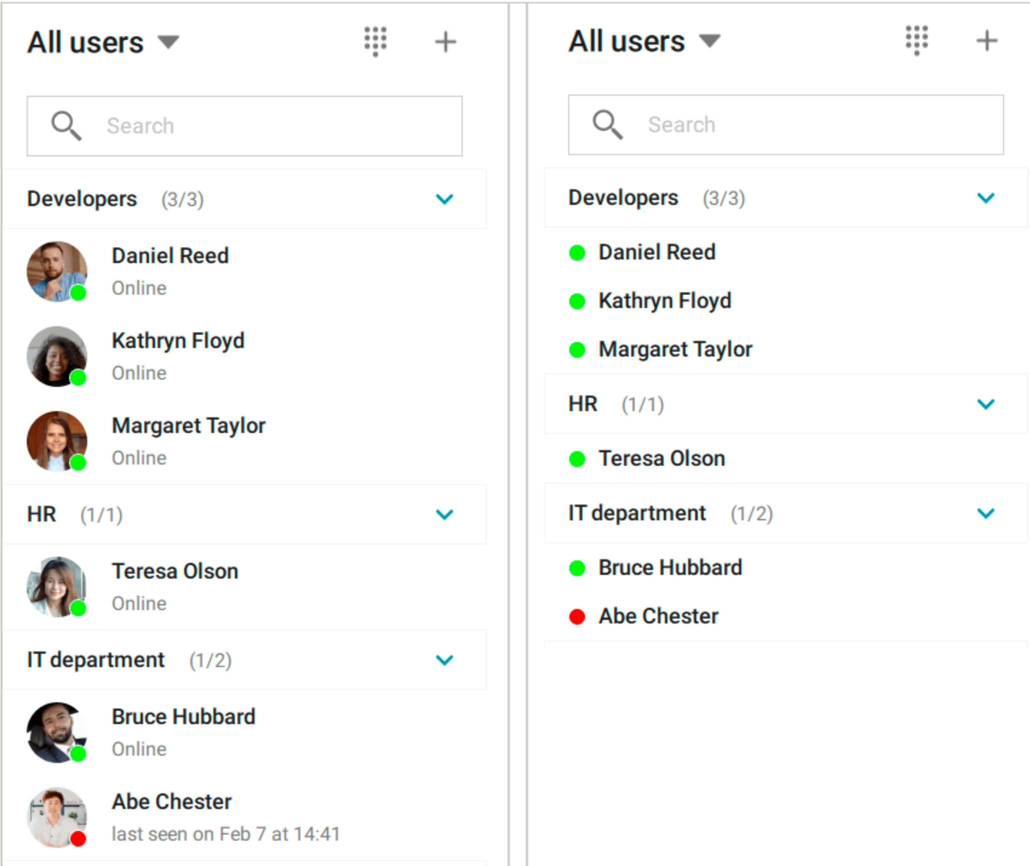


Use **Custom** option in the **Videoarea** section to customize *the frame color of active speaker window* (**orange** by default).

If you want to change the space between video windows, move the slider in the **Videoarea** section (0 pixels by default) or set your value in the corresponding field.



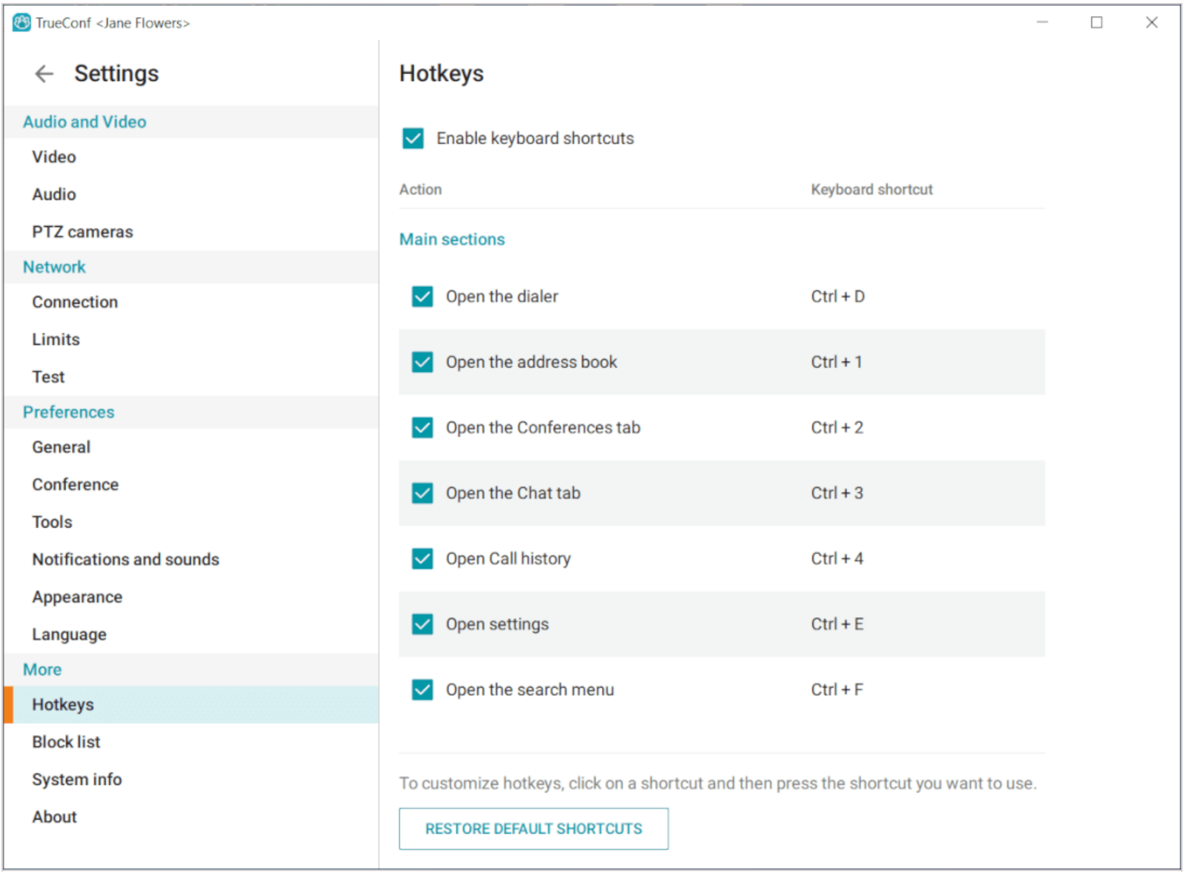
Check the **Compact display of contact list** box to hide user avatars.



To change the layout background, go to the **Video area background** section. You can choose one of the default backgrounds or set a custom one by uploading an image from your computer (click on the button ).

3.7. Hotkeys

You can control the application using hotkeys. The list of all combinations is available in **Settings →More → Hotkeys**.



Uncheck the box next to the action name in the list to disable a given keyboard shortcut. To completely disable any combinations in the application, uncheck the box **Enable keyboard shortcuts**.

You can also customize the hotkeys.

To do it, take these steps:

1. Left-click on a shortcut.
2. Next, press the new keyboard shortcut.

> **!** To re-assign hotkeys, try to avoid system shortcuts such as Ctrl + C, Ctrl + Alt + Delete and others. If you specify the shortcut which is already used, you will be offered to re-assign it (assign this shortcut for the new action and automatically select a different shortcut for the old action) or cancel changes.

1. New keyboard shortcuts are not saved automatically, so after configuring them, click the **Save** button.

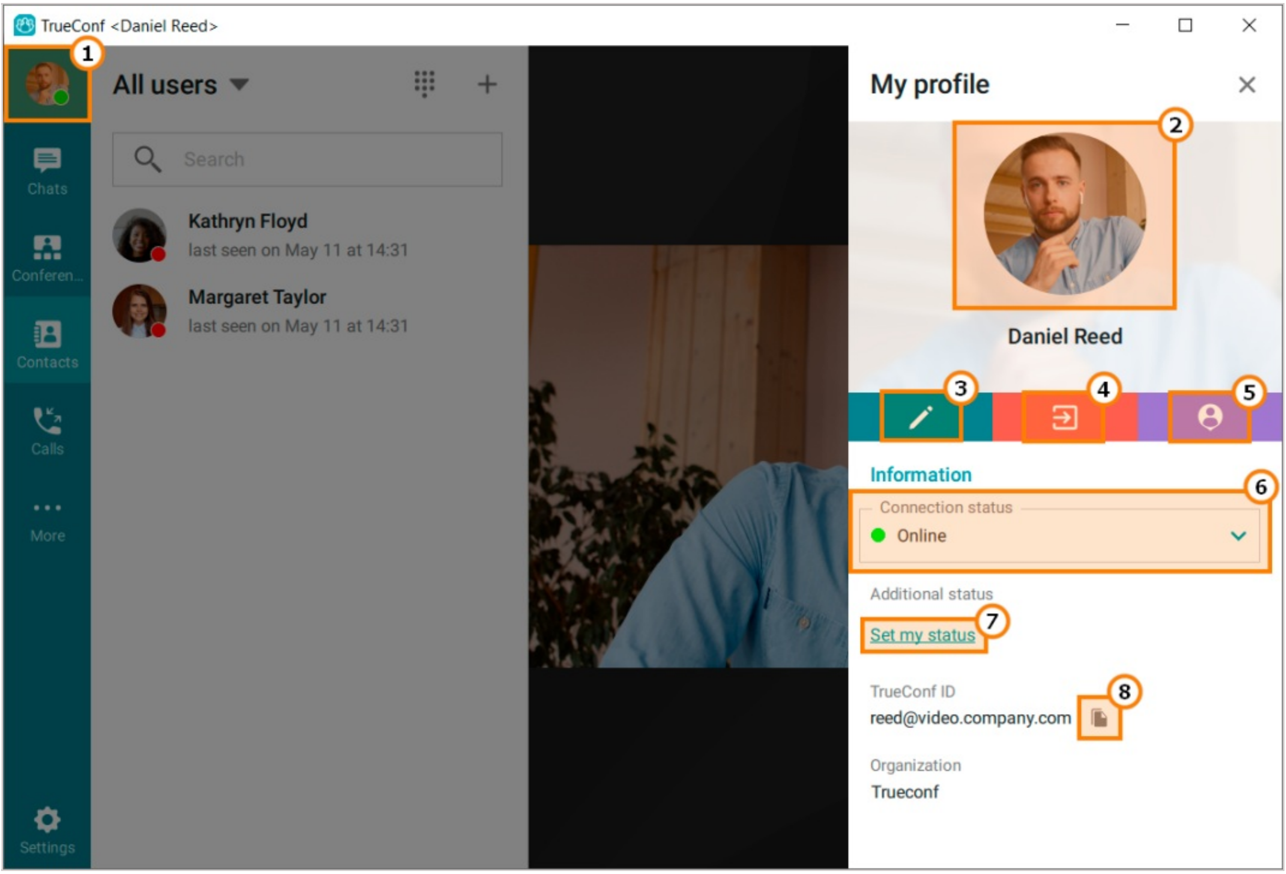
Please note that multiple fixed shortcuts are assigned for some actions. If necessary, you can disable one or more shortcuts by clicking the left mouse button.

If necessary, you can discard the changes made earlier (even the ones previously saved) by clicking the **Restore default shortcuts** button.

4. Editing user profile

4.1. Viewing and editing

You can proceed to your profile and edit your personal information:



1. Click on the avatar icon in the application menu to proceed to your profile
2. Click on the lower part of the avatar to replace it.
3. Edit your personal information (display name, phone number, etc)

> * You may not be allowed to edit your personal information if Active Directory/LDAP extension is enabled on your TrueConf Server instance. In this case, please contact your server administrator to edit your profile.

4. Sign out

5. Open your personal area in the browser

6. Status selection (Online/Do not disturb). If **Do not Disturb** status is selected, you will not receive notifications even if they are enabled in the applications settings.

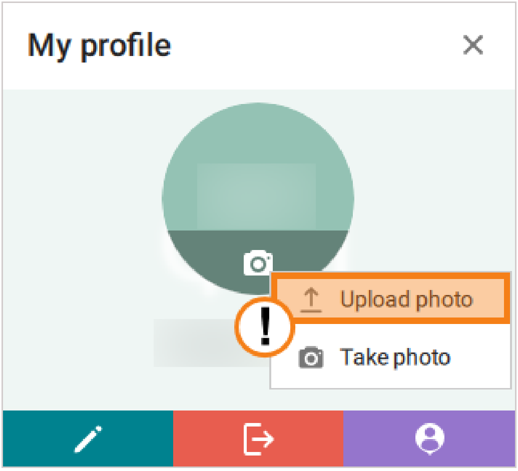
7. Set additional status

8. Copy your TrueConf ID (you can use it to share your TrueConf ID with your colleagues)

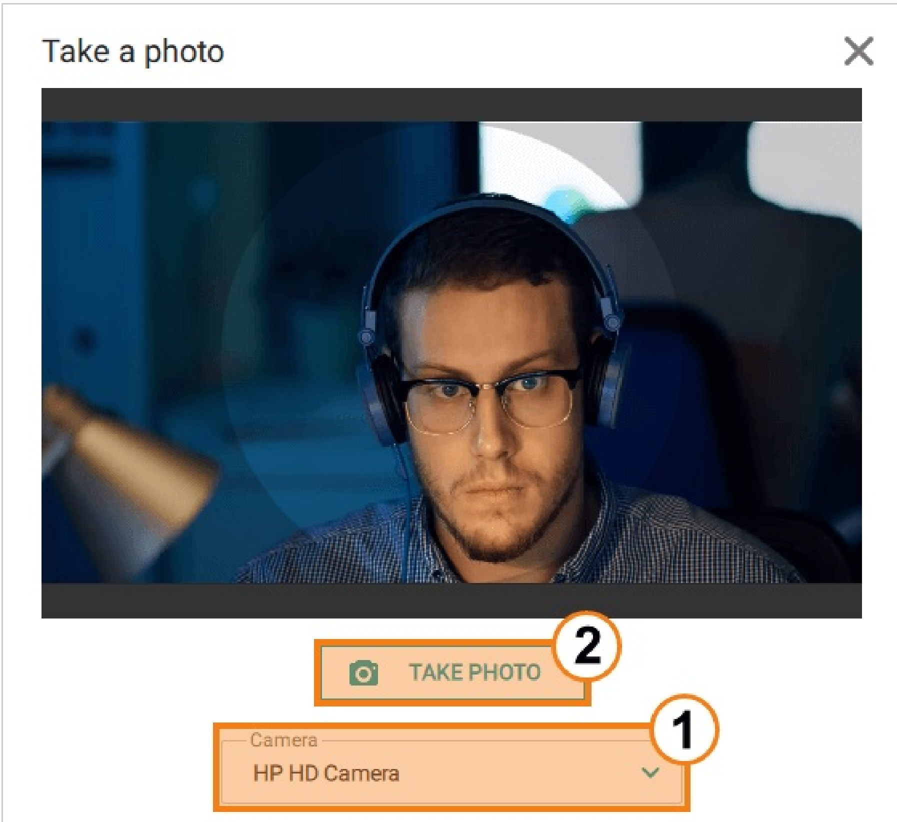
To replace the avatar, click on the bottom part of the image (clicking the upper part will open the built-in image viewer) and select the required option in the context menu:

- **Upload photo**. This option opens the file explorer on your device.

i It is possible to upload images in the following formats: **jpeg, png, gif, .jpe, jif, jfif, jfi, bmp, png, gif, webp**.



- **Take photo**. When clicked, this button opens the menu where you can upload a photo (1) or take it now (2):



- After a photo is uploaded, the additional **Delete** option will be included in the context menu.

4.2. License information

Participation in conferences hosted on your server is determined by separate **PRO licenses**. If you do not have such a license, you will not be able to join a meeting as a participant, owner or moderator.

Information about the availability of PRO licenses will be displayed on your avatar (a colored circle with the **PRO** caption) and in your profile. The information that you will see will vary depending on the license status:

- If you have a **permanent PRO license**, in addition to the title, you will also see the help button with additional information about it.

- If you have a **temporary PRO license**, you will also see its expiry period, and the help button with additional information.

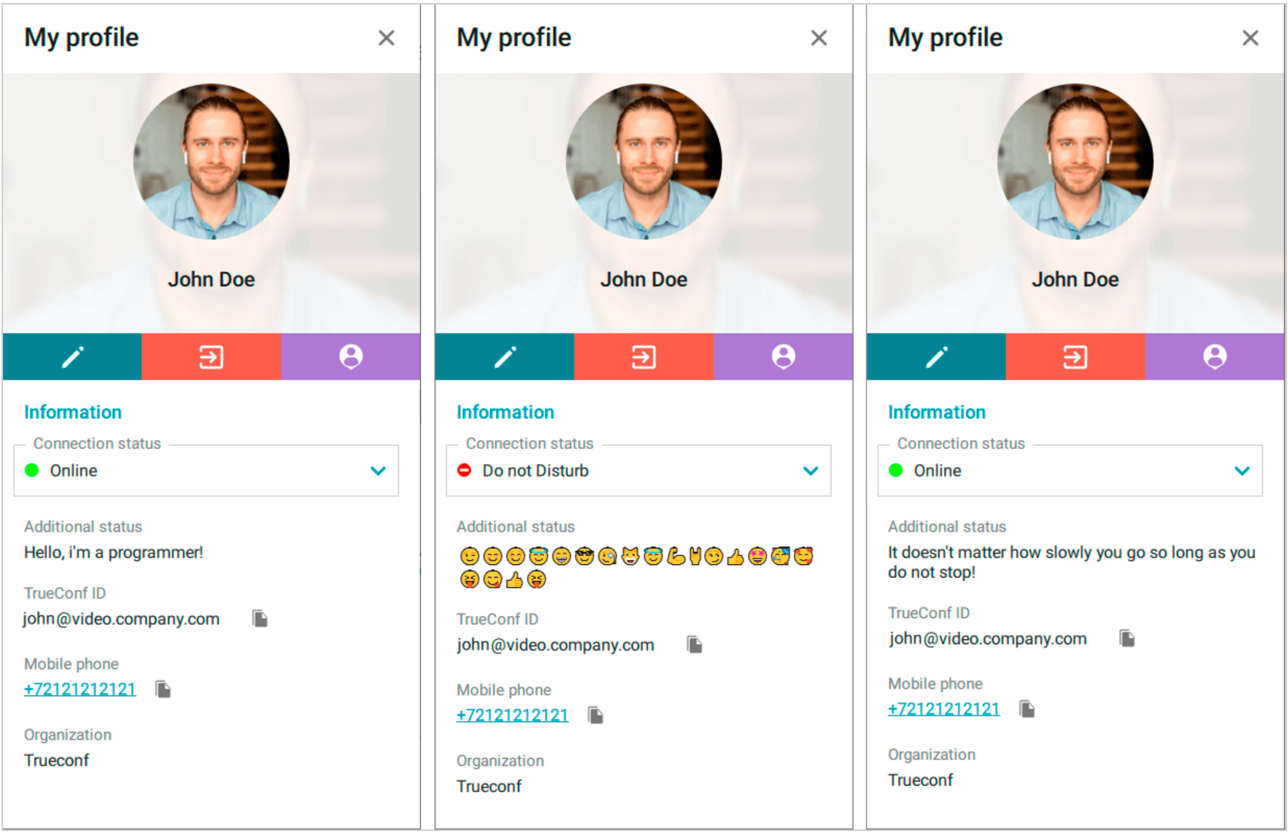
In case of a temporary license, you will be able to renew it for 24 hours manually.

If the license was not given, there will be the corresponding text hint below your name.

> The administrator of your TrueConf Server can disable the display of information about the PRO license and make it impossible for users to renew such licenses manually. This means that the administrator fully controls the distribution of licenses and if you are unable to participate in a conference due to some reason, contact the administrator.

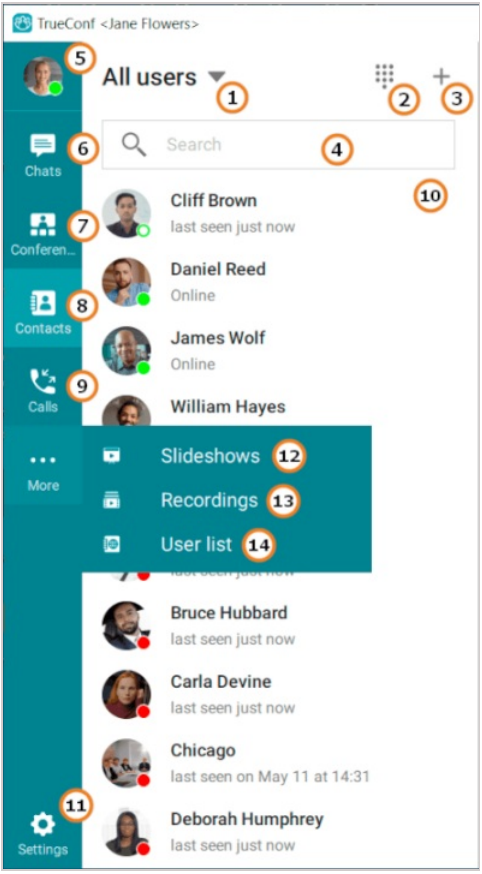
4.3. Possible settings options

You can set an additional custom status in their profiles. To set a status, open your profile and click on the **Set my status** button. Please note that the status field is limited to **256 characters**.



5. Address book

When you sign in, the pinned main menu and address book will be displayed in the left part of the window:



1. Address book display and user groups management
2. Dialer
3. Adding user groups.
4. Search field
5. Your profile
6. Chats
7. Conferences created ad hoc and meeting scheduling
8. Address book
9. Call history
10. List of users and their statuses
11. Settings
12. Slideshow
13. Video records
14. Global user list

You can change the width of the displayed contact list by dragging its right border. Similarly, you can change the size of other sections and panels displayed on the right side.

5.1. User statuses

Each user in the address book is assigned with one of the following statuses:

- — Online
- — Online from a smartphone or tablet
- — Online from a hardware or software SIP/H.323 endpoint
- — Recently active: the network status for users who previously signed in to the mobile application, but are currently offline
- — Owner of an ongoing conference
- — Busy (in a video call or conference)
- — Away (away from keyboard for a certain time period, 15 minutes by default)

> When the computer screen is blocked, the status is immediately set for the user who is signed in TrueConf client application. In this case, timeout settings for this status are ignored.

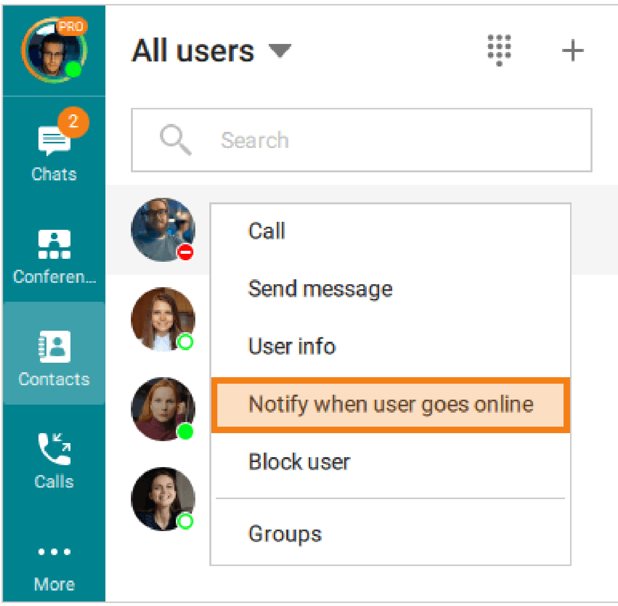
- — Do Not Disturb (can be set manually by a user)
- — Offline.

5.1.1. Notifications about user status change

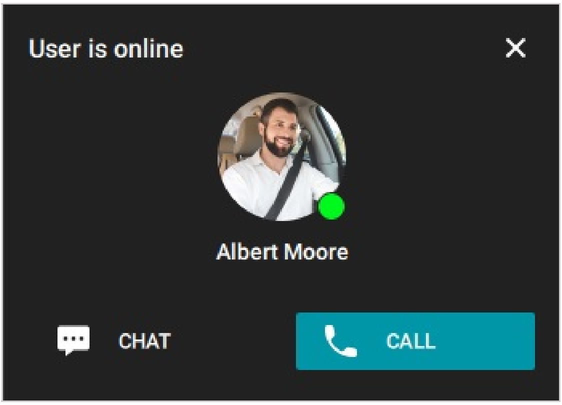
TrueConf client application supports notifications about user status changes.

If you want to be notified as soon as some user's status is changed to **Online**, take these steps:

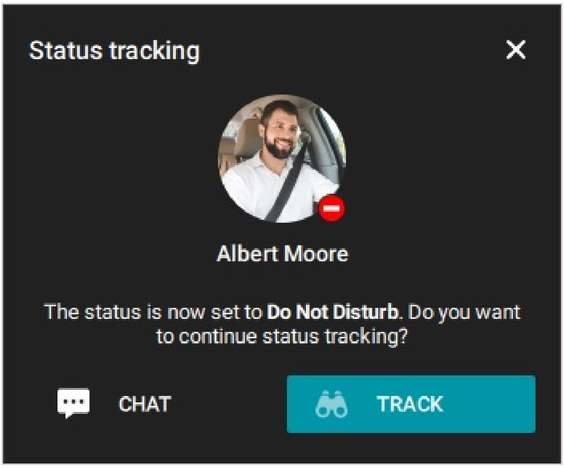
1. Find the user in the address book
2. Right-click on this contact
3. Select the **Notify when user goes online** option in the context menu.



4. If you want to disable the notification before the user's status is changed, right-click on this contact and select the option **Don't notify when user goes online**.
5. As soon as the user's status changes, you will receive a notification with an option to make a call or send a message.



6. If you miss the notification and the status of the selected user changes again, the corresponding alert will be displayed. You can either continue status tracking or go to the chat.



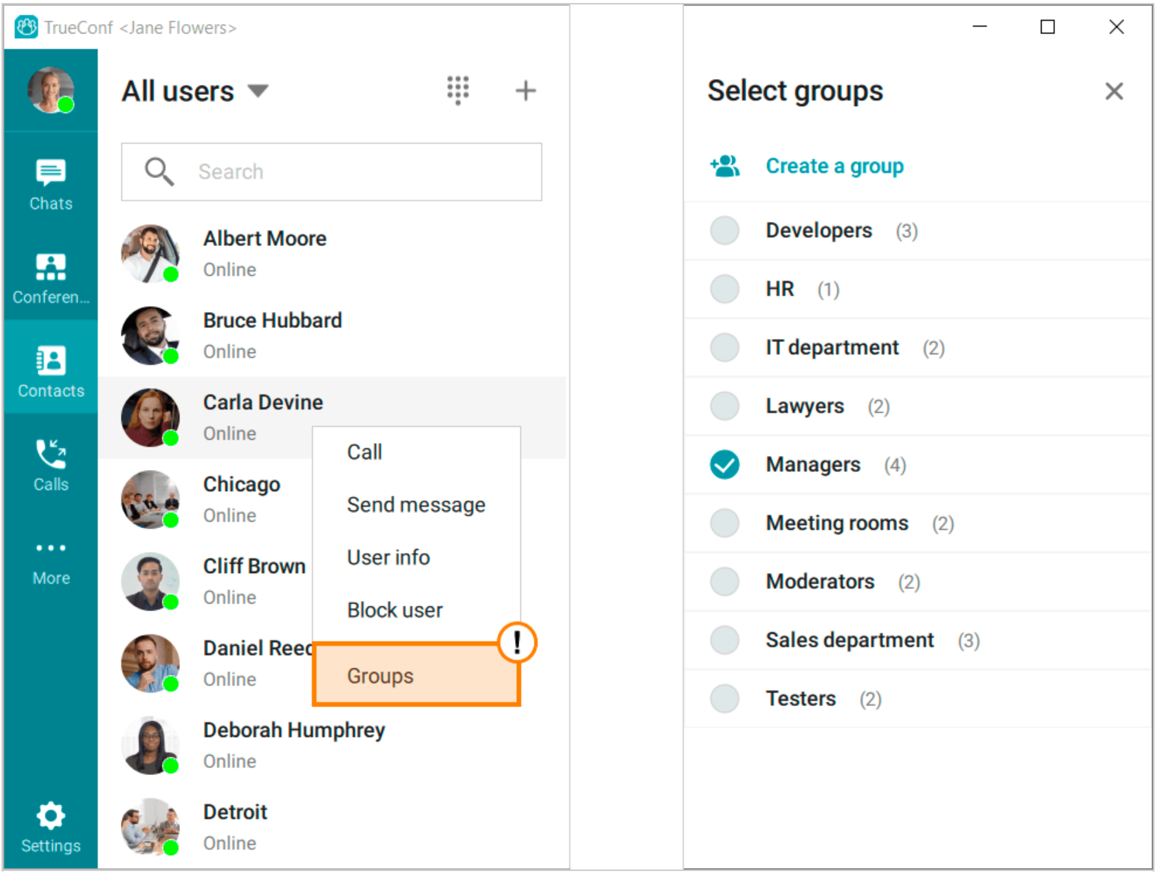
> Notifications about status changes are also available for [user groups]](#page4-bulk-operations).

5.2. Adding contacts

Enter user's TrueConf ID in the search field and click + button.

> Similarly, you can add third-party SIP/H.323 and RTSP devices to your address book by entering a call string in the appropriate format instead of TrueConf ID.

After that you can create a new group for this user or add the user to an existing group:



*

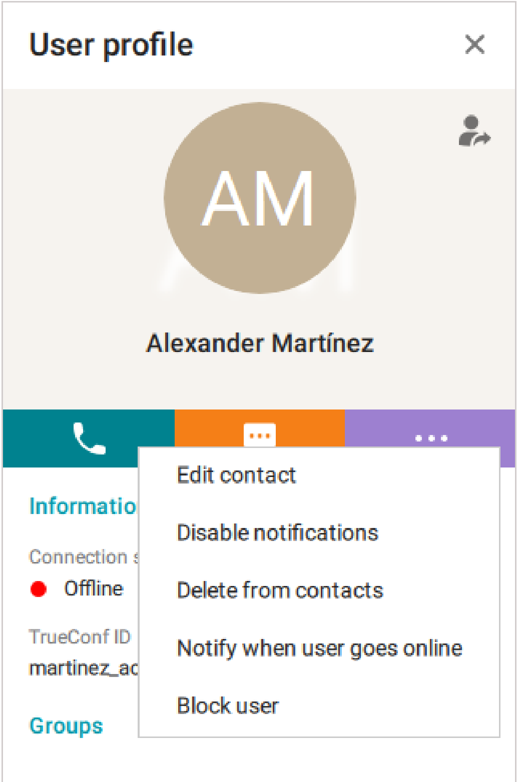
TrueConf Server administrator can add contacts to your address book and set group display automatically to save you from manual settings.

5.3. Viewing and editing user profiles

To view a user profile, left-click on the user's name or select **User info** in the context menu.

The following options are available in the user profile:

- Call the user or send a personal message
- Share the user contact
- Quickly copy a separate item from the profile (phone number, TrueConf ID, etc.) with the special button
- Open the additional settings menu where you can:
  - view/edit user information
  - disable/enable notifications about messages from the user
  - delete or block the user
  - set a notification that will be displayed when the user's status changes to **Online**.

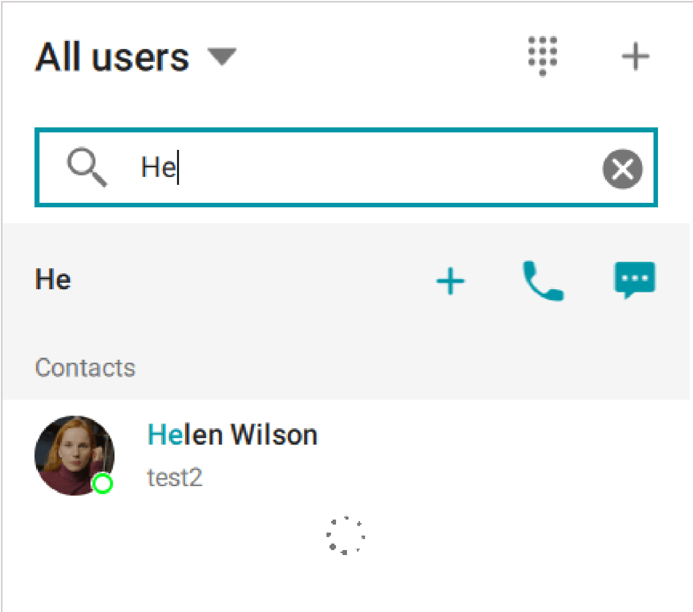


> *i* If a user has been added to your address book by your TrueConf Server administrator, you will not be able to delete or edit the user profile.

To share a contact, click , select the recipient in the pop-up window and click on the **Share** button. You can also do it in the group chat window by clicking on the button.

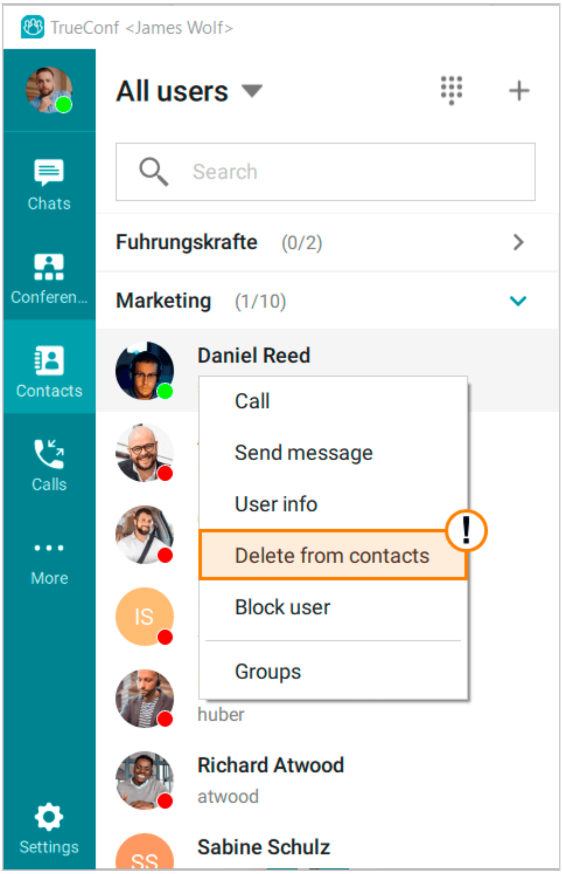
5.4. Searching for users

Enter the user's TrueConf ID or the initial characters of his/her name in the search field above the address book. The application will filter the contact list according to your query and it will be easier for you to find the contact.



5.5. Deleting users

Find the user or device by their display name in the address book, open context menu and click **Delete from contacts**.



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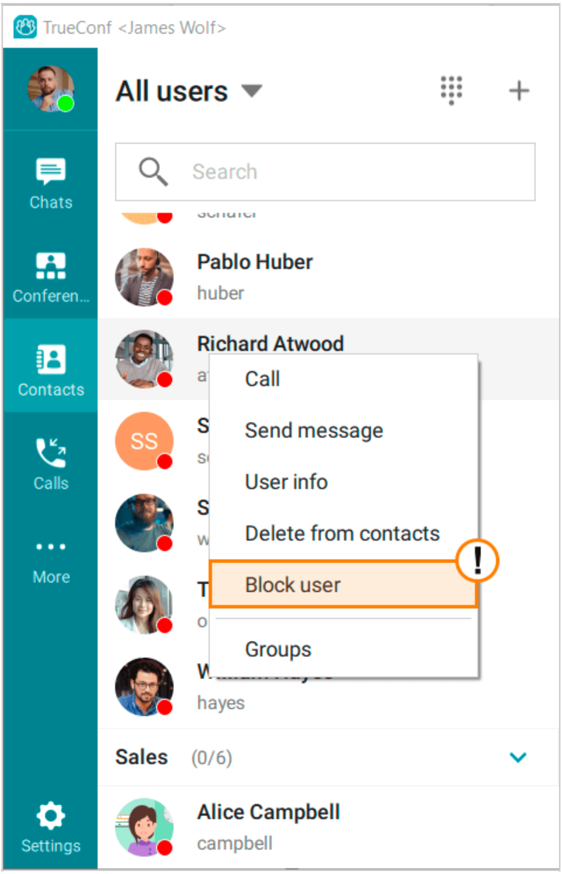
You can only delete the address book contacts you've added manually.

5.6. Blocking users

You can block any user via the context menu.

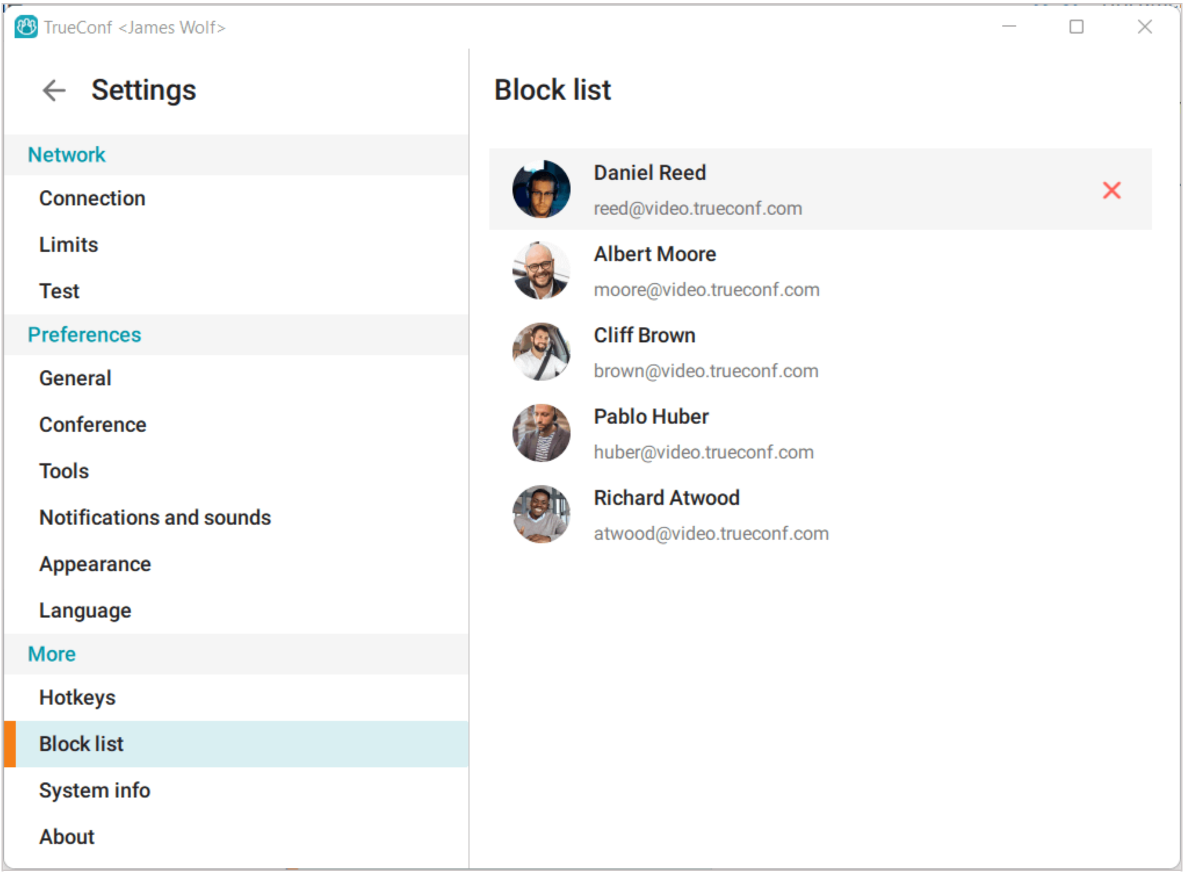


Similarly, you can unblock users.

When a user is blocked, they will not be able to:

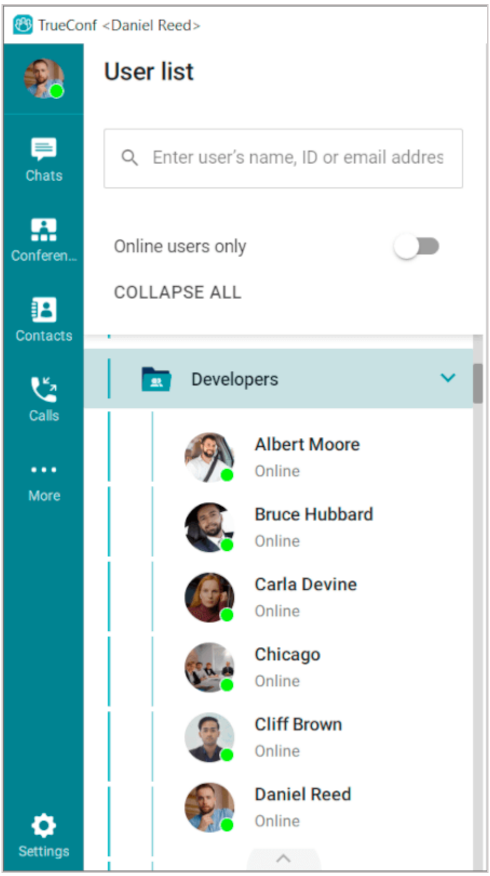
- call you
- invite you to meetings

You can find the list of blocked users in the **Settings →More →Block list** section of your client application:



5.7. Global user list

Click **Global user's search** in the main menu to view the list of users from federated TrueConf Server instances.



This menu item may be unavailable if if TrueConf Directory integration is not set up on your TrueConf Server instanceTrueConf Directory.

5.8. Configuring your address book

5.8.1. Setting up your address book view

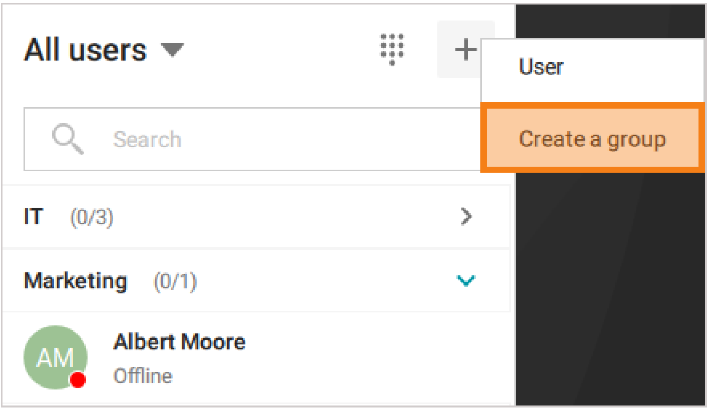
Click the arrow above the search field to change the address book view. You can select the users you would like to be displayed: all/online/groups.

In order to display only users from a certain group in the address book, click **Show one group** and select the necessary groups from the list.

Select **Show groups** if you would like to display the list of your groups.

5.8.2. Adding user groups

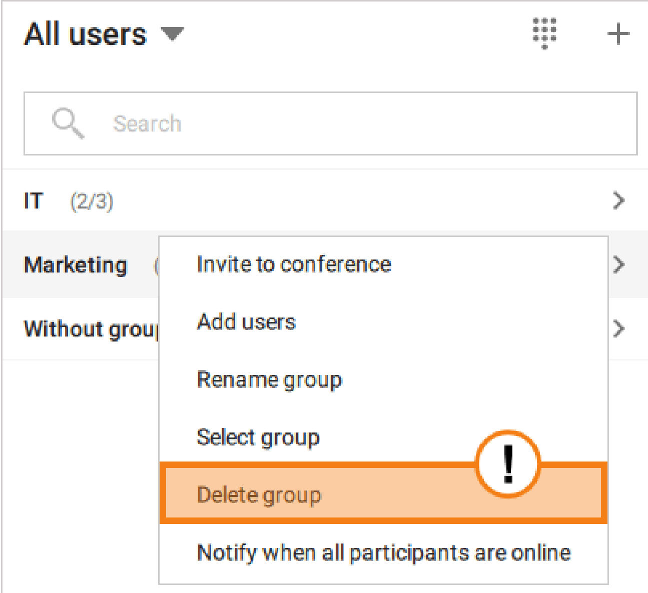
At the top of the address book, click on the + button above the search box and select **Create a group** in the drop-down menu. Now you can start creating a user group. Enter its name and save your changes.



5.8.3. Editing or deleting groups

To delete or edit a group:

1. Open your address book and choose to show groups.
2. Right-click on a group and select **Rename group** or **Delete group** in the context menu:



In this menu, you can also add new users to the group with the corresponding button.

5.8.4. Bulk actions

You can also select multiple users for popular bulk actions, such as:

- Create a conference
- Create a group chat
- Create a group
- Manage groups
- Set a notification that will be displayed if several people/a selected group change their status to **Online**.

If the option **Notify when all participants are online** is clicked, you will receive a notification each time when any of group member changes their status. This feature can come in handy if you need to reach out to a group of people, for example, employees in a certain department and it does not matter to you who becomes available first.

To learn more about this feature, check the section Notifications about user status change.

6. How to call TrueConf users

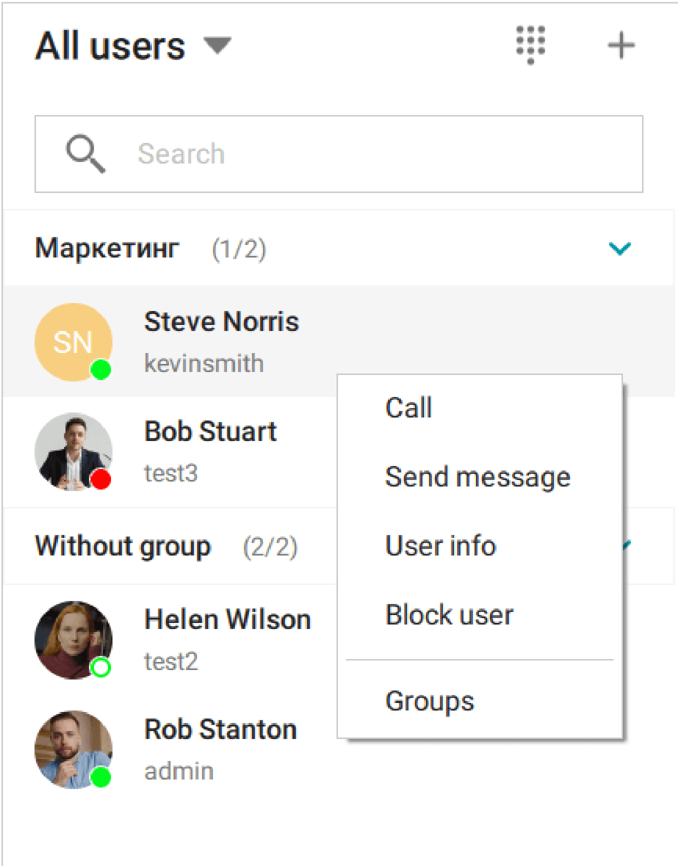
To call a TrueConf user, you can use one of the options described below.

6.1. From the search field

Try search in TrueConf application. Enter the user's name or ID in the search box and click the Call button .

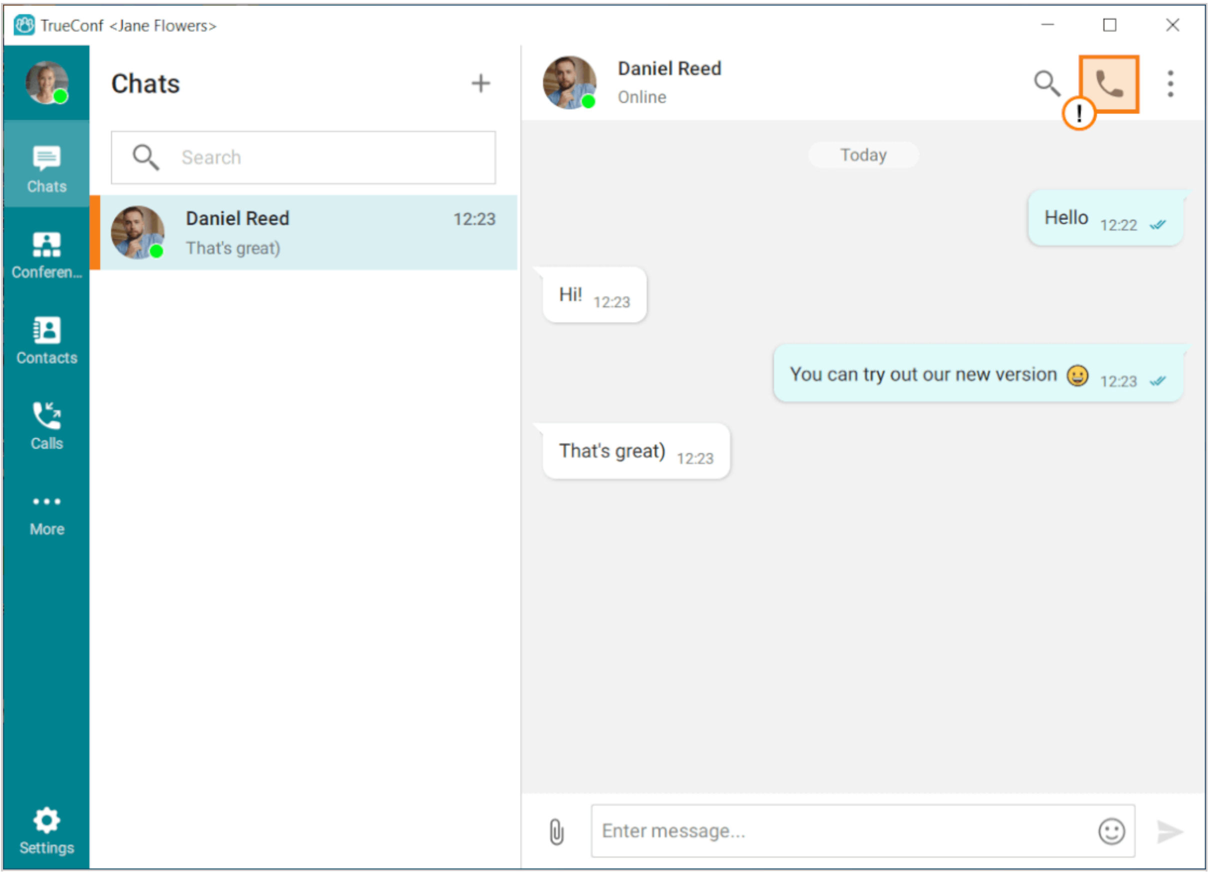
6.2. From the context menu

A call will also start, if you select the **Call** option in the context menu for a contact either in the address book or in the chat list.



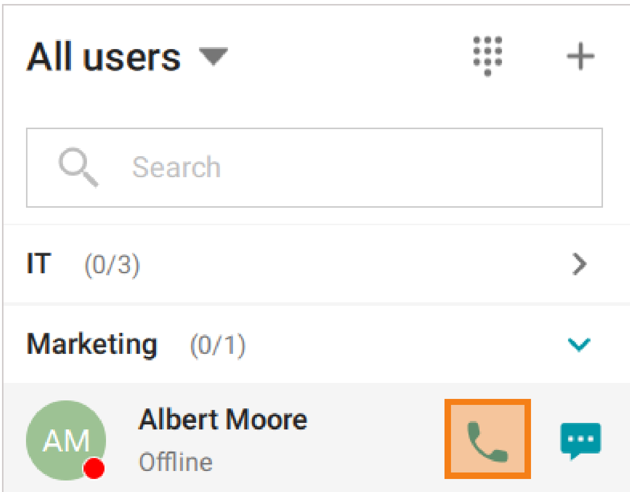
6.3. From chat

If you need to call a user you are currently chatting with, click on the button located in the right upper corner of the chat window.



6.4. From the address book

Select a user and click the call button in the pop-up panel.



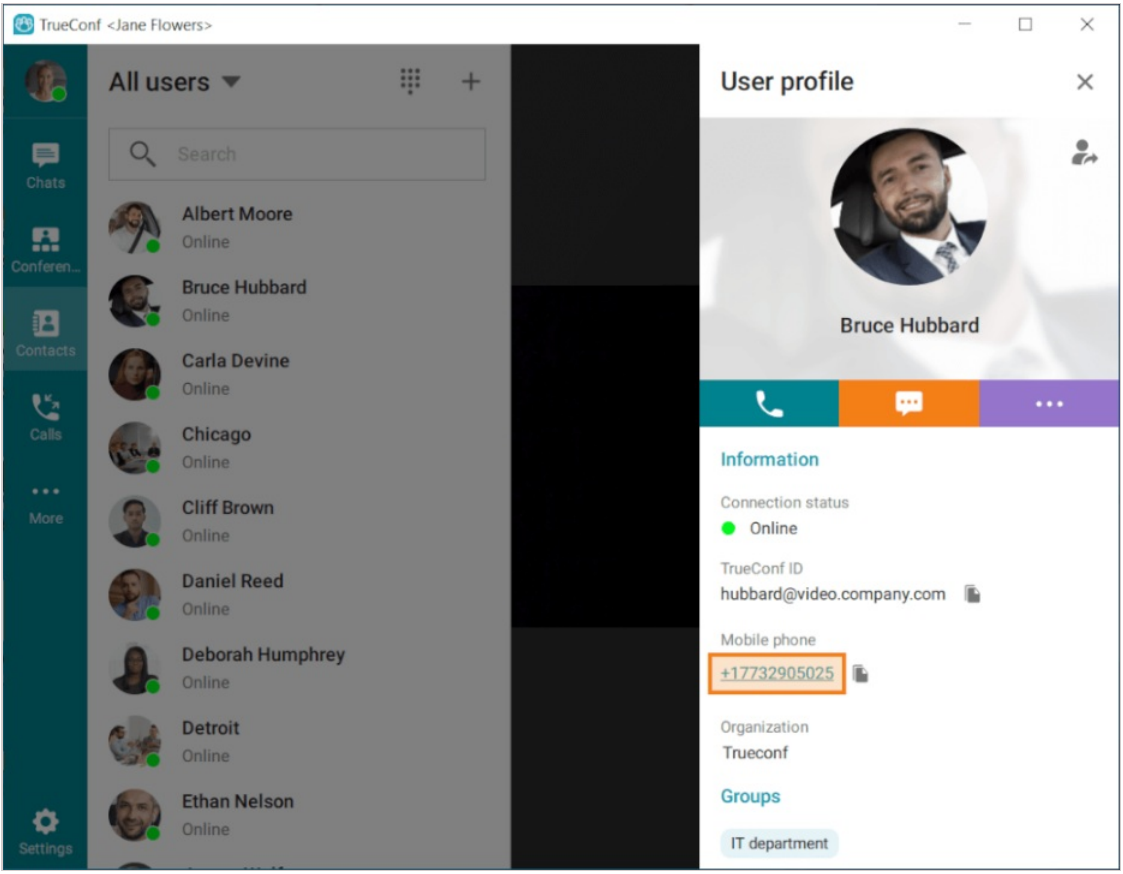
7. How to make phone calls

You can call a phone number in the user profile, in the search field or in the address book dialer.

> *i* Phone calls will be possible only if your TrueConf Server is integrated with a PBX or VoIP service.

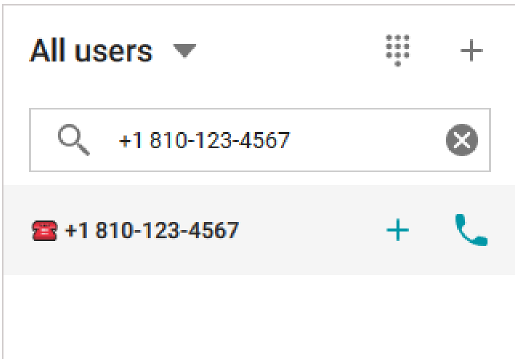
7.1. Calls from user profile

If the phone number is specified in the user profile, you can click on the field with the number and the application will start a call to the user in the following format: `#tel:phone_number` :



7.2. From the address book search field

Enter a phone number in the international format in the search field. Next, click the Call button in the menu that appears below. For example, you can dial **+1 (833) 878-32-63** to call TrueConf sales department.



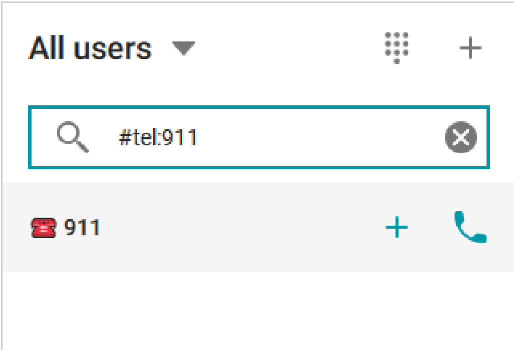
You can also call extension numbers connected to your PBX.

For example, if a user's internal number is **910**, to call this contact in the client application address book, you need to enter a number in the format `#tel:910` in the search bar. To make a call to external devices or a server, use a call string in the format appropriate for this type of recipient. Next to the filtered address book list, a new, dimmed line will pop-up at the top, just like when entering a regular username. You can interact with it just as you would interact with the others.

Types of supported devices and call examples: SIP devices (including the cases when DTMF is used), H.323 devices and RTSP devices.

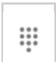
You can send DTMF commands to the devices that support them.

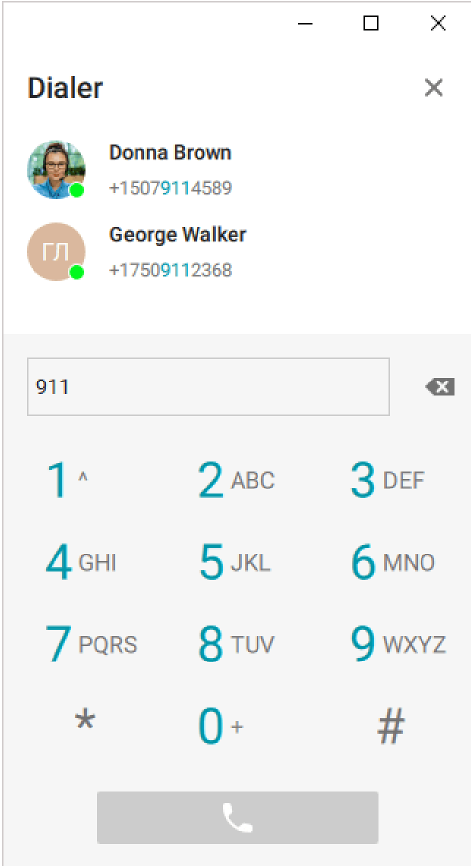
To test the DTMF dialing feature, make a test call, for example, to #sip:thetestcall@getonsip.com. When DTMF commands are sent, the dialed numbers are returned and voiced by a bot.



7.3. From the dialer

You can call a phone number from TrueConf client applications for Windows, Linux, macOS or Android by using the dialer. In the dialer window you can also view the list of the users whose phone numbers are added on TrueConf Server.

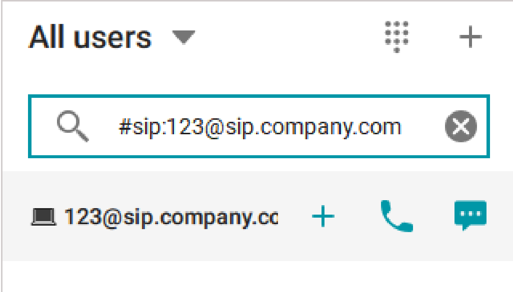
In TrueConf client application, you can access the dialer by clicking on the button located on the top panel: .


Dialer
Donna Brown
+15079114589
George Walker
ГЛ
+17509112368
911
1 ^
2 ABC
3 DEF
4 GHI
5 JKL
6 MNO
7 PQRS
8 TUV
9 WXYZ
*
0 +
#

8. How to call SIP/H.323 and RTSP endpoints

8.1. How to make a call

To call third-party video conferencing endpoints or servers, enter the call string in the format corresponding to the user or device you are calling. When entering the address, you can see a new darkened interactive string next to the filtered list of the address book contacts.



Supported devices and call string formats:

- SIP endpoints (including DTMF commands)
- H.323 endpoints
- RTSP devices.

> * Since TrueConf Group is a hardware SIP endpoint, you will need to use the SIP call string when making a call to this device.

Automatic processing of URLs for meetings created on third-party services like Zoom, Lifesize Cloud, or BlueJeans, for example:

- `https://zoom.us/j/842858705`
- `https://call.lifesizecloud.com/10132060`
- `https://bluejeans.com/7110871129`

8.2. Using tone dialing

You can send DTMF commands to DTMF-compatible devices in RTP EVENT and SIP INFO modes. To learn more about DTMF commands, please read the documentation provided by the manufacturer for your device.

The following symbols can be used to add pauses directly to the call string:

- `,` — short pause (a few seconds)
- `;` — long pause (waiting for a dial tone from the caller).

For example, if you want to call a SIP server with IP `192.168.1.99` from the TrueConf client application to a conference protected by PIN `123456`, you can avoid manual PIN entry by using a URI with a preset:

`#sip:@192.168.1.99;123456`

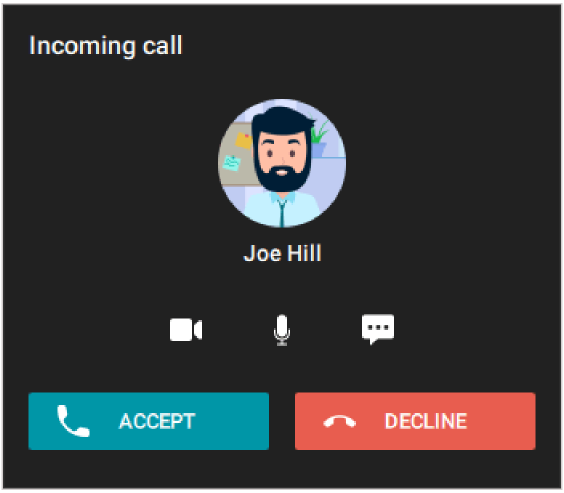
To call `13478783263` with extension `222`, you can use the following call line:

`#tel:13478783263,222`

9. Incoming calls

9.1. Actions when receiving an incoming call

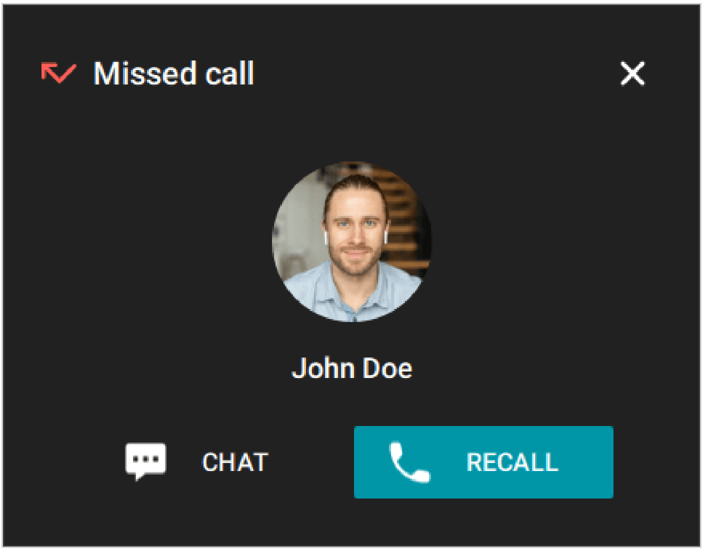
In case of an incoming call or conference invitation, you can perform multiple actions apart from accepting or declining the call. The following options are available:



- Click and to turn off your camera and microphone before accepting the call (you can also turn on these devices if they had been disabled before)
- Click to send a message instead of replying to a call. You select one of the short answers or write your own message. The message will be sent to the caller and the call will be automatically declined. This feature is available for a one-on-one call or conference invitation sent by a moderator of an ongoing meeting.

9.2. Missed call

If you do not reply to a call or a conference invitation, you will see a notification. In case of a missed call, the notification will include a button opening the chat with the user who made the call. You can also call the user or join the conference by clicking on the corresponding button.



10. Conferences

Any video conference provides the following participants' rights:

- Owner
- Moderator
- Operator
- Speaker
- Interpreter.

Read the "User roles" section to learn more about the features available to registered users and guests during conferences.

> *i* Conferences with simultaneous interpretation can be created only in the scheduler, but not in the quick conference menu.

10.1. Connecting to a conference

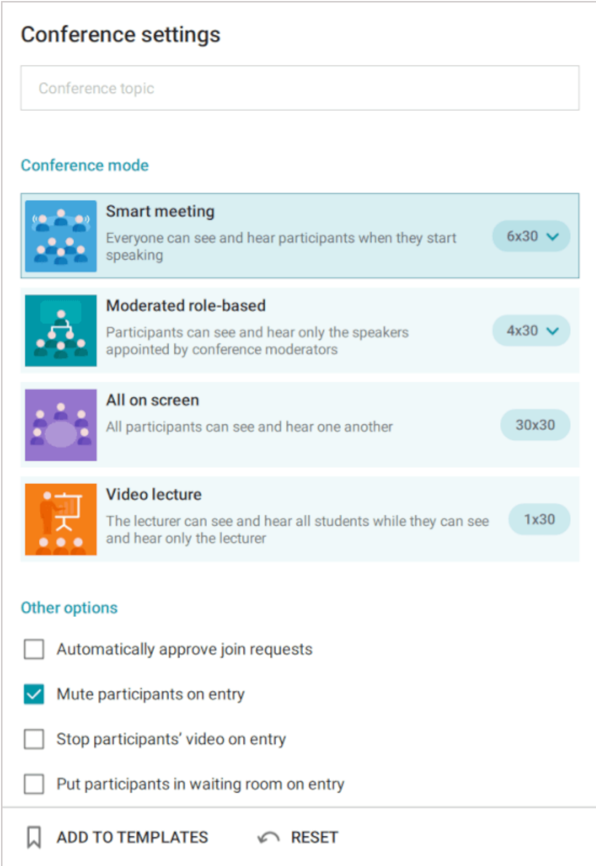
You can join a video conference in the following ways:

- Call the conference owner
- Call the conference with its ID
- Choose a conference and click **Connect to the conference** in the conference scheduler
- Connect to the conference from its webpage
- Go to the conference page by entering its ID from the TrueConf Server guest page
- Go the conference webpage from the personal area. This option is available only to the conference owner.
- Enter the conference join URL in the search field of your client application.

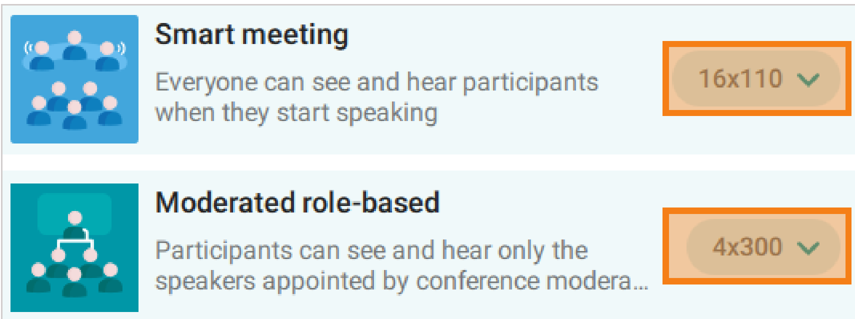
> *i* Ability to join conferences depends on separate PRO licenses. This feature may be unavailable due to license restrictions on the video conferencing server. In this case you will see the corresponding message.

10.2. Creating a conference

Go to the **Conferences** section in the main application menu or click on the button . Select the **Meet now** option in the left part of the window in the **Conferences** section. Then, enter the meeting name and select the conference mode: Smart meeting, Moderated role-based conference, All on screen or Video lecture.



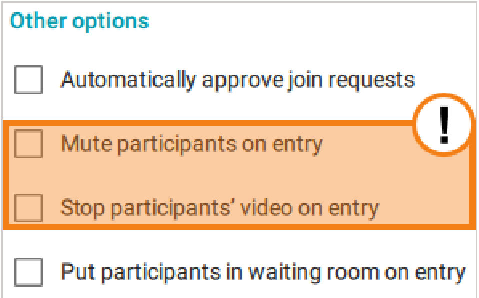
In **Smart meeting** and **Moderated role-based** conference modes, you can select the maximum number of participants and presenters on the podium. To do it, click on the drop-down menu which is in the right-hand side of the conference mode section:



When you join a meeting by calling its owner, the owner receives a corresponding request by default. You can change this settings by enabling the **Automatically approve join requests** checkbox. In this case, a user who wants to participate in the meeting will automatically connect to the meeting when calling its owner.

> You can also enable this box after creating the conference. To this end, go to **Conference options** in the conference control panel by clicking on the corresponding button .

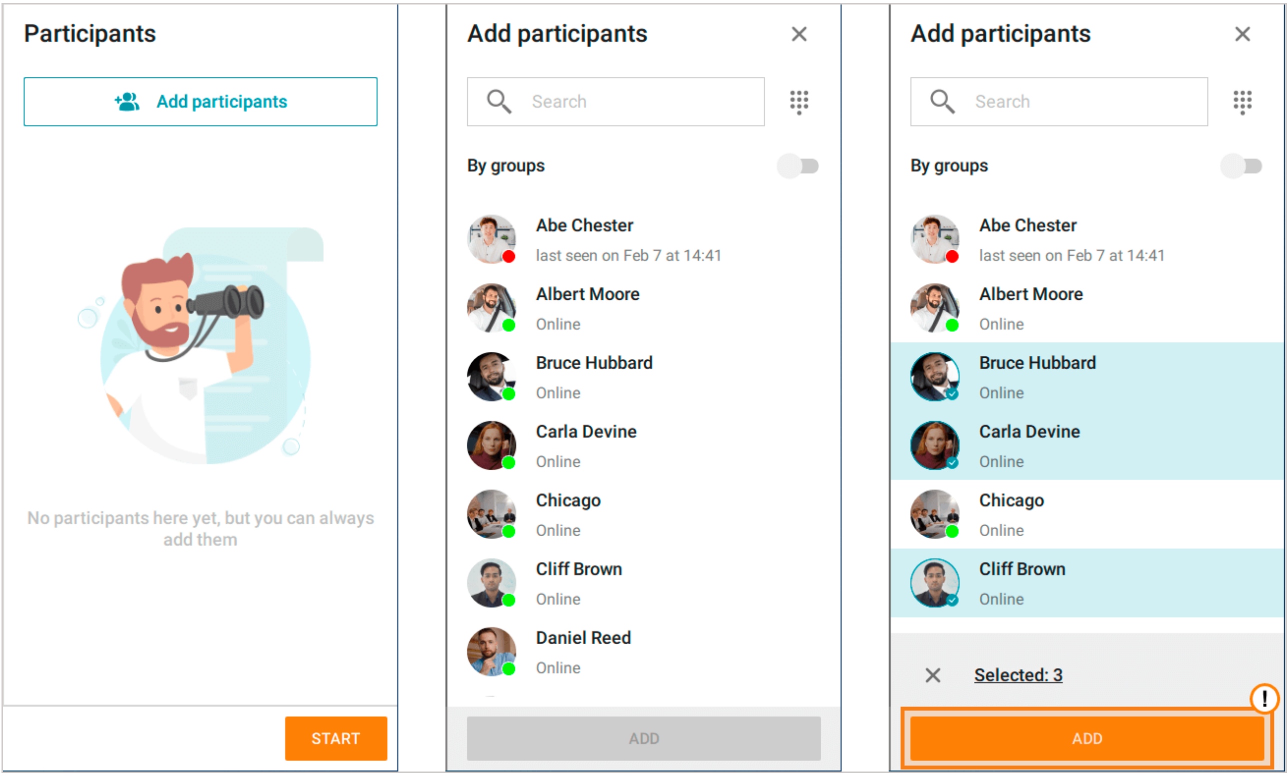
To turn off participants' cameras and microphones at the moment when these users join the conference, mark the corresponding checkboxes in the **Other options** section:



> *****
> If **Smart meeting** mode is selected, the box **Mute participants on entry** will be checked by default. To learn more about the mechanism of filling the vacant spots on the podium in a smart meeting, check the corresponding section.

The button ↶ can be used to clear the meeting settings and create it from scratch.

After that, click on the **Add participants** button in the **Participants** section to open your contact list. Select the participants you would like to invite to a conference and click **Add**.

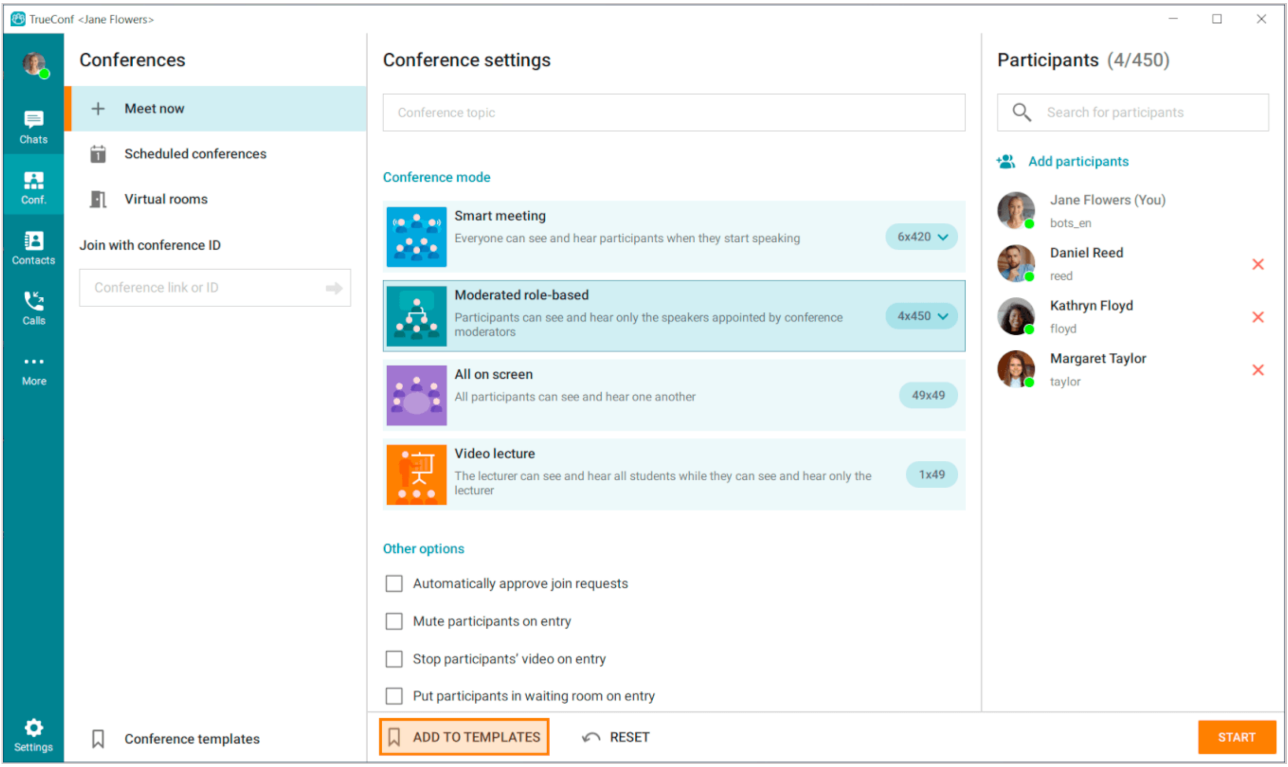


10.2.1. Conference ID

Every conference has its unique identifier (conference ID, CID). It is generated automatically when a conference is created. However, it can also be set manually. If you know CID, you can easily join the conference.

10.2.2. Quick conference template

You can use templates to start conferences with pre-defined settings.



> **!** All conference templates are locally stored on the user's computer and are not synchronized with other devices.

Click on the **Add to templates** button if you want the template to be displayed in the **Conferences → Conference templates** section. Later you can use this template at any time.

When selecting a template, you can start and delete a conference, change its name, mode and number of participants. You can undo all unsaved edits by clicking on the corresponding button. Once you have made the changes, you can save your template.

> **!** You cannot restore the deleted template.

10.2.3. Conference start types

In addition to a quick conference, there are 2 kinds of conferences that can be distinguished by the launch type: scheduled conferences and virtual rooms.

Scheduled conference is a meeting that will be started at a specified time. It is possible to create a recurring conference that will be started periodically. One can also configure reminders about this event.

Virtual room is a conference that does not require time settings and automatic start schedule. Participants can enter and leave this conference via conference ID anytime until the conference is hosted on the server.

Virtual room benefits:

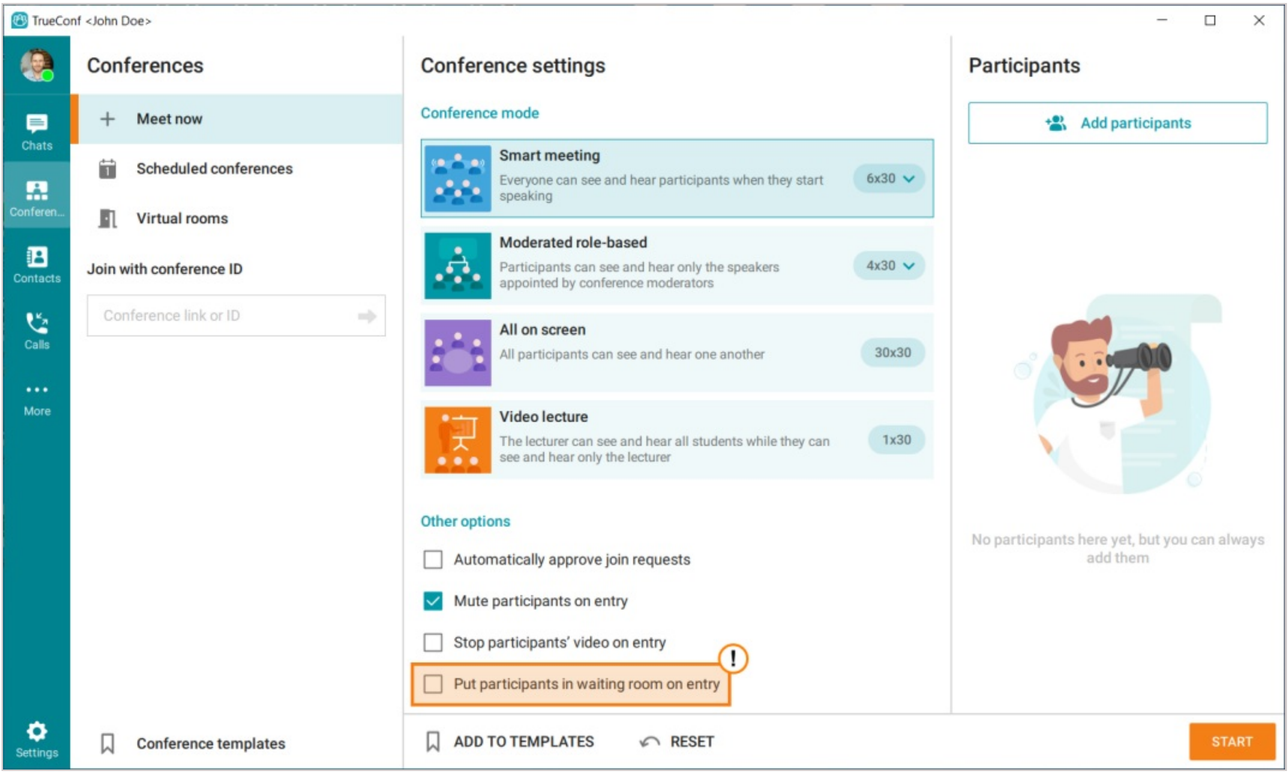
- Instant meetings and messaging: you won't have to spend your time on meeting setup. Create your own virtual room once and use it when you need it most.
- 24-hour access: your partners and customers will be able to connect to your virtual room at any time, from any place.

- Save money on meeting room equipment in your office.

10.2.4. Waiting rooms

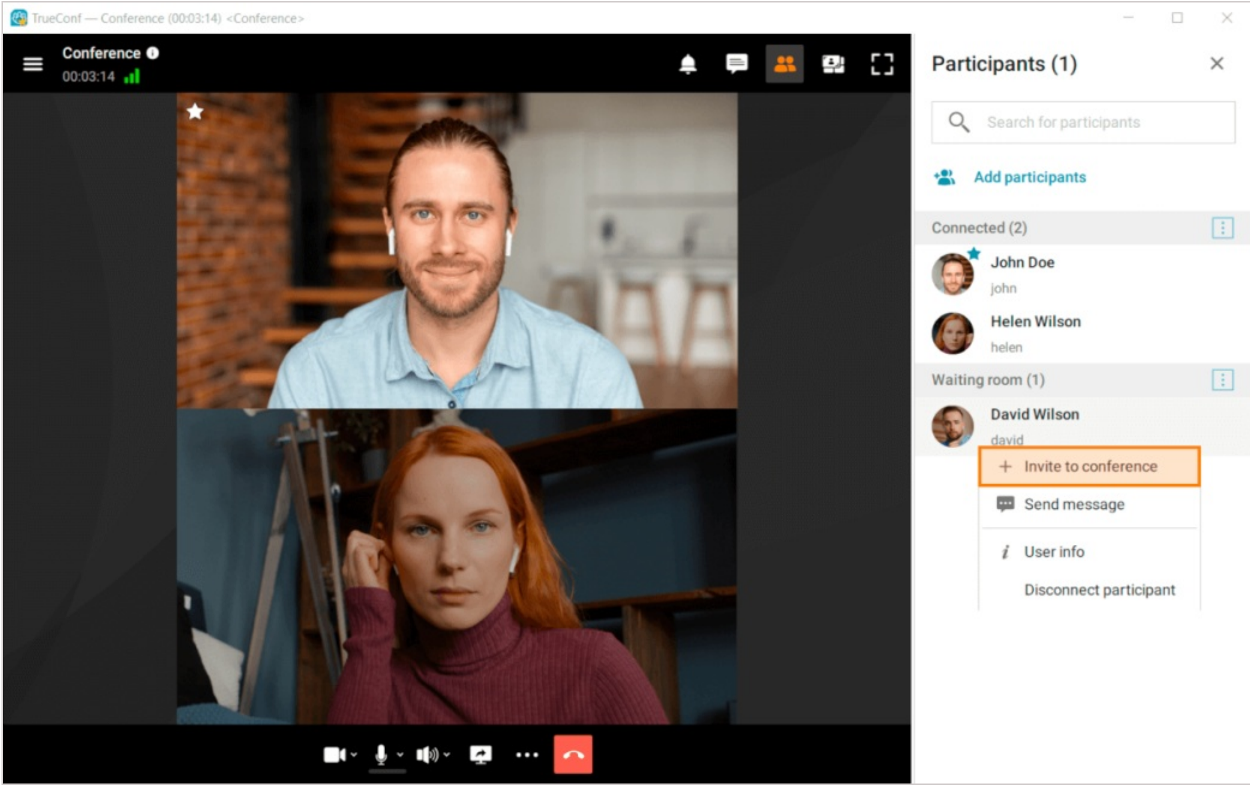
When creating a conference (of any type), you can check the box **Put participants in waiting room on entry**; in this way, you can make sure that all participants except moderators are immediately directed to the waiting room. The user, who is put in the waiting room, will be unable to see or hear other participants (and vice versa). Additionally, this person will be unable to access collaboration tools. A participant can be moved to the waiting room only by moderators (including the owner).

> ! The waiting room will be available only if you check the box **Put participants in waiting room on entry** when creating a conference.



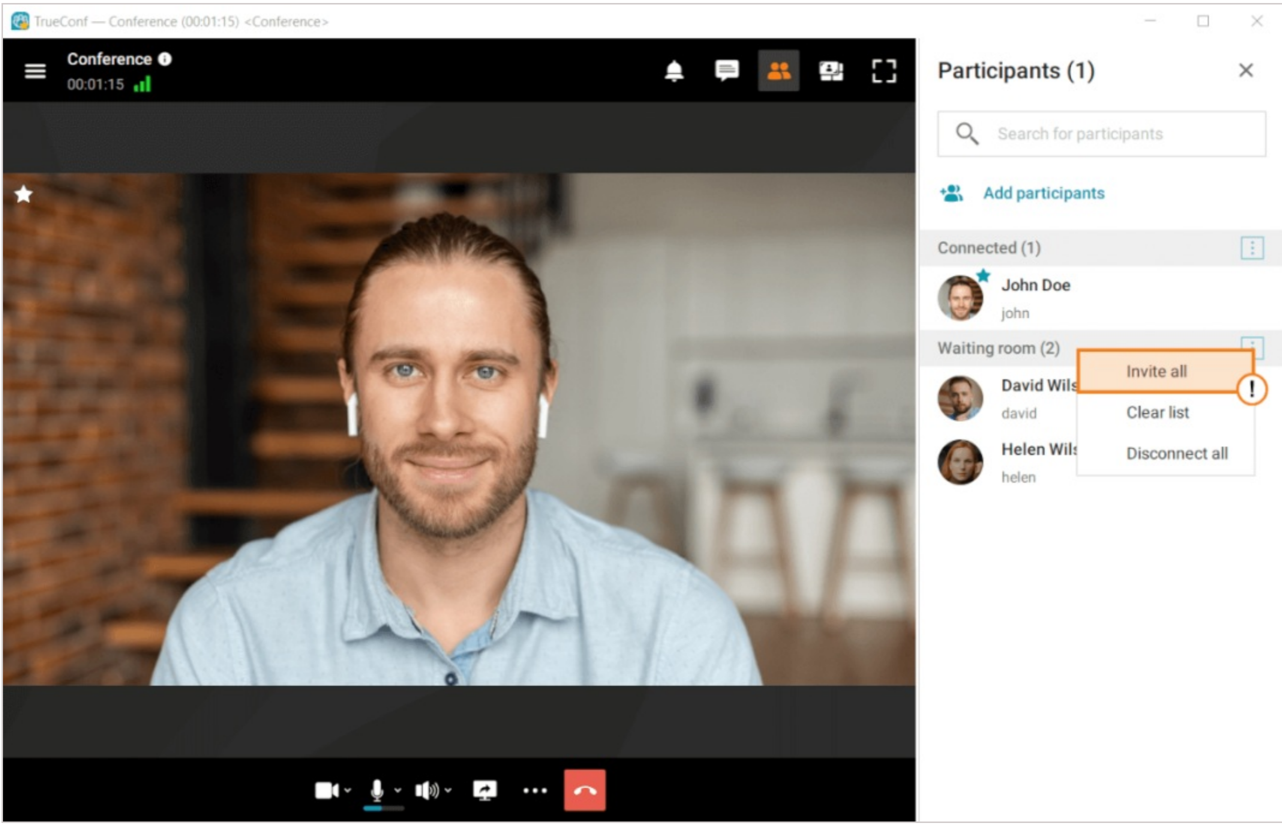
With the help of waiting rooms, you can flexibly manage access to the meeting. To move a participant from the waiting room back to the conference:

1. Click on the  in the upper right corner of the conference window.
2. In the list of conference participants, you will find the **Waiting room** section. Right-click on a participant and select the option **Invite to conference** in the drop-down list.



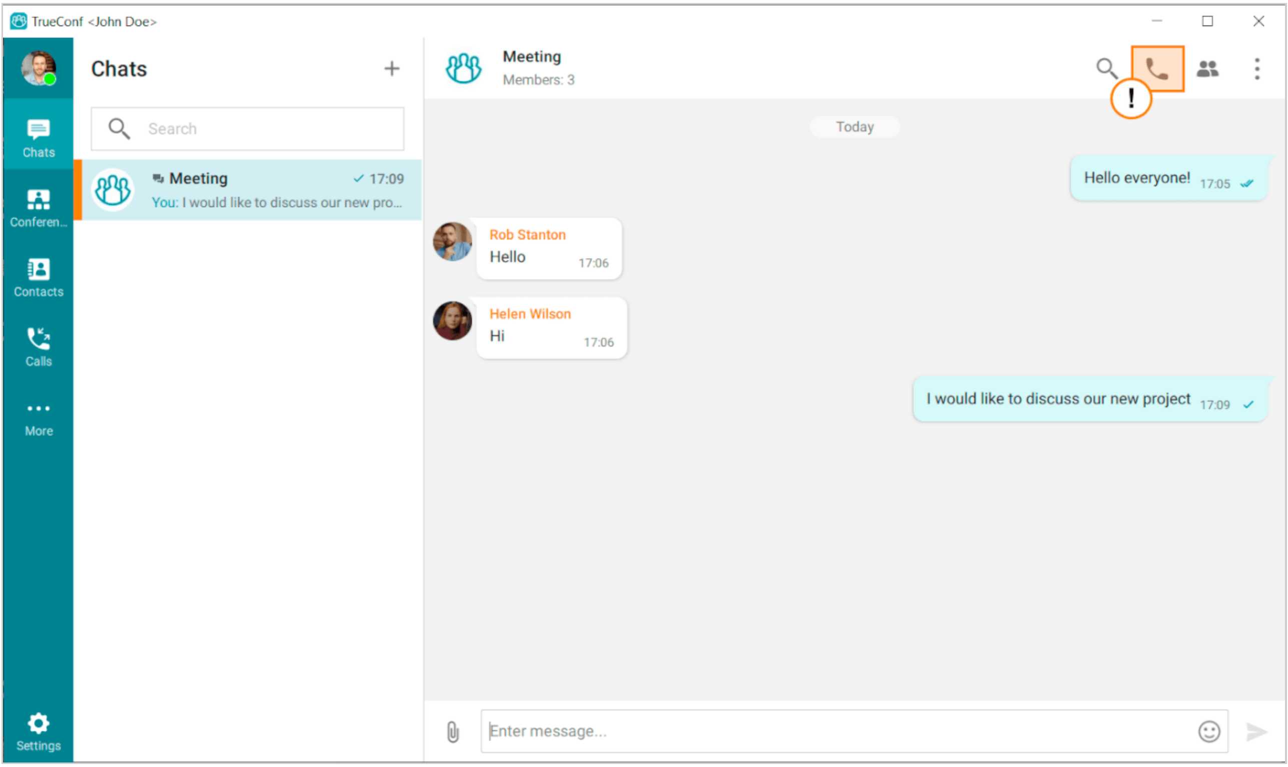
Similarly, you can send a participant to the waiting room during a conference: right-click on a user in the list of participants and select the option **Put in the waiting room** .

You can also invite all participants who are currently in the waiting room. Click on the button which is near the list heading and select the **Invite all** option in the context menu.



10.2.5. Creating a conference from a group chat

To call all participants of a group chat, click on the in the upper right corner. The button will open the menu for [starting an instant meeting] (#create-conference). All chat participants will be automatically invited to the new conference.



By default any group chat that is escalated into a conference will be linked to this conference. The conversation between participants will not be divided into multiple chats. You can unlink the chat and the conference with the button which is in the upper part of the **Conference settings** section.

Click on the **Unlink** button in the pop-up window. As a result, a new chat will be created for this conference.

10.2.6. Call-to-conference escalation

Sometimes, it may be necessary to involve additional participants into a discussion. TrueConf for Windows client application allows you to quickly transform your video call into a group conference in "all on screen" mode and connect new participants. There is no need to interrupt a call and start a new video conference.

To add a new participant to a conversation:

1. Go to the **Contacts** section in the main menu which is in the left part of the application.
2. Choose a participant you would like to invite and call this user in the way described in the corresponding section of this guide.

> *i* You can also connect an IP camera or other devices using call strings.

You can invite users to an ongoing call in a different way:

1. Click on the in the upper right corner of the video call window.
2. Add participants from the list of contacts or search for them by entering their names (here you can also connect a device by entering a call string).

When a video call is escalated into a conference, a group chat will be automatically created for this conference. This chat will be available to all conference participants. However, it will not include the messages from the private chat with the user participating in the initial video call.

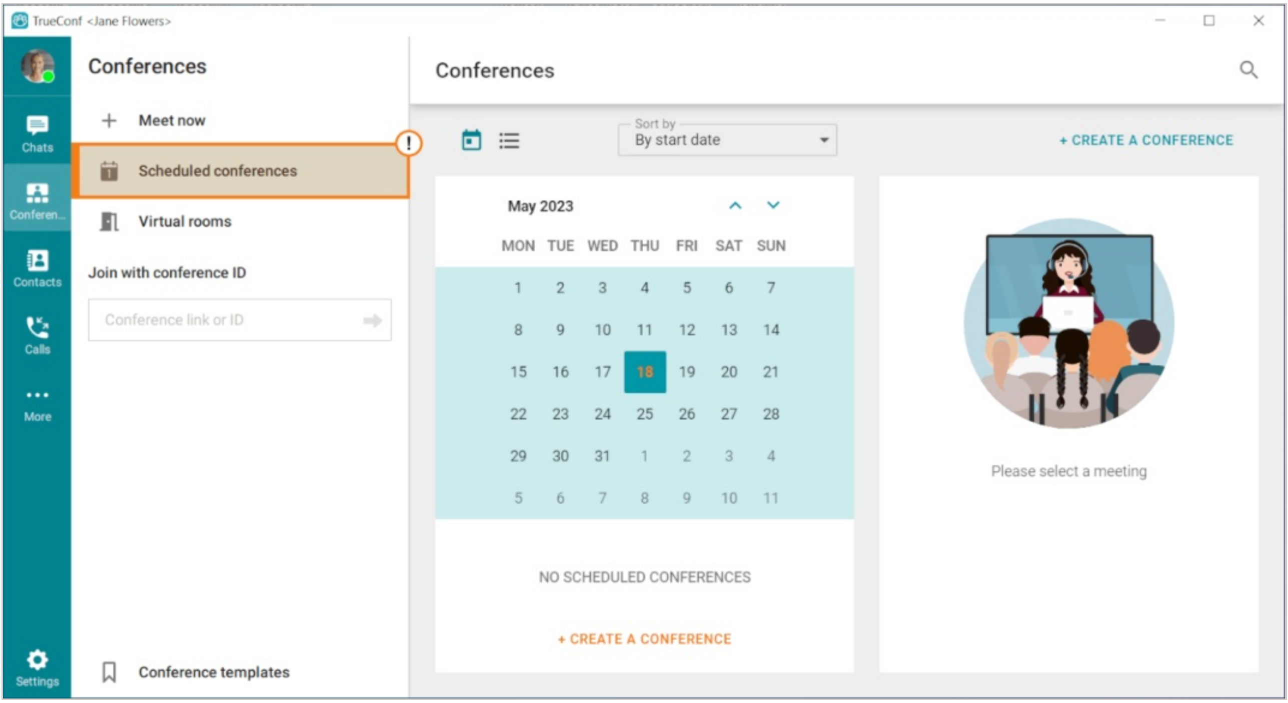
11. Conference scheduling

The scheduler is used to arrange conferences on a certain date and create virtual rooms.

Conference scheduler is a tool that enables a user to schedule and edit video conferences on TrueConf Server. This tool is available in TrueConf client applications for desktops and mobiles. With its help, you can create a conference without the administrator`s assistance. One can add events that will start automatically at the selected time. It is possible to create either one-time or recurring events (the administrator does not have to be involved). It is also possible to create virtual rooms that are constantly available to participants.

Clicking on the **Scheduled conferences** button in the **Conferences** section to go to the conference scheduler where you can:

- Schedule a conference on a specified date and select its settings
- Change the start mode to a virtual room (conference without a schedule) when creating a meeting or editing its settings
- Create a conference template.



> You may not be able to create a conference in the conference scheduler due to the restrictions set by the server administrator on a group level.

To create a conference in the scheduler, follow the next steps:

1. Click the (**Create a conference**) button.

2. Select a conference type: **private** (by default) – only registered users can join the meeting, or public (webinar) – both registered and unregistered users can join.

> The **Public conference** option may not be available if the server administrator didn't enable this feature.

3. If necessary, check the box **Language interpretation mode**. This will give you access to additional

settings needed for organizing special conferences with multiple language audio tracks.

> **Language interpretation mode** is a special type of video conference with multiple independent audio tracks. During such conferences, participants do not see the interpreter, but they can hear the translation if they choose a certain language in the application.

4. Click **Continue** to proceed to the main settings.

11.1. "General" tab

In this section, you need to specify:

- Conference name
- Mode (**Smart meeting** is selected by default)
- Number of presenters if you select a moderated role-based conference or a smart meeting
- The conference type: scheduled meeting or a virtual room
- For a scheduled conference, set the start date and time, duration, and if necessary, its recurrence (you can select the days on which this meeting will be held)
- If necessary, you can enable the notification that the event is about to end. It is also possible to choose the time when this notification should be displayed.
- In case you are unsure if the scheduled conference duration will be enough, you can make it possible to extend this event by checking the box **Enable conference time extension**
- You can also send automatic email reminders about a scheduled conference to its participants. This feature should be activated in advance by the administrator in the settings of the video conferencing server. It is possible to add 4 reminders about one conference. To do it, click the **Settings** button. If you want to apply the notifications settings specified on the video conferencing server, click the button **Use administrator specified settings**.

> Sometimes when editing a conference created previously, you will see the reminders that you did not add. This issue may occur because the administrator of TrueConf Server activated global notifications settings when your conference had already been created.

If you need to create conferences with the same settings in a single click, check **Save as a template** box.

11.2. "Participants" tab

Proceed to the **Participants** tab and add participants in one of the following ways:

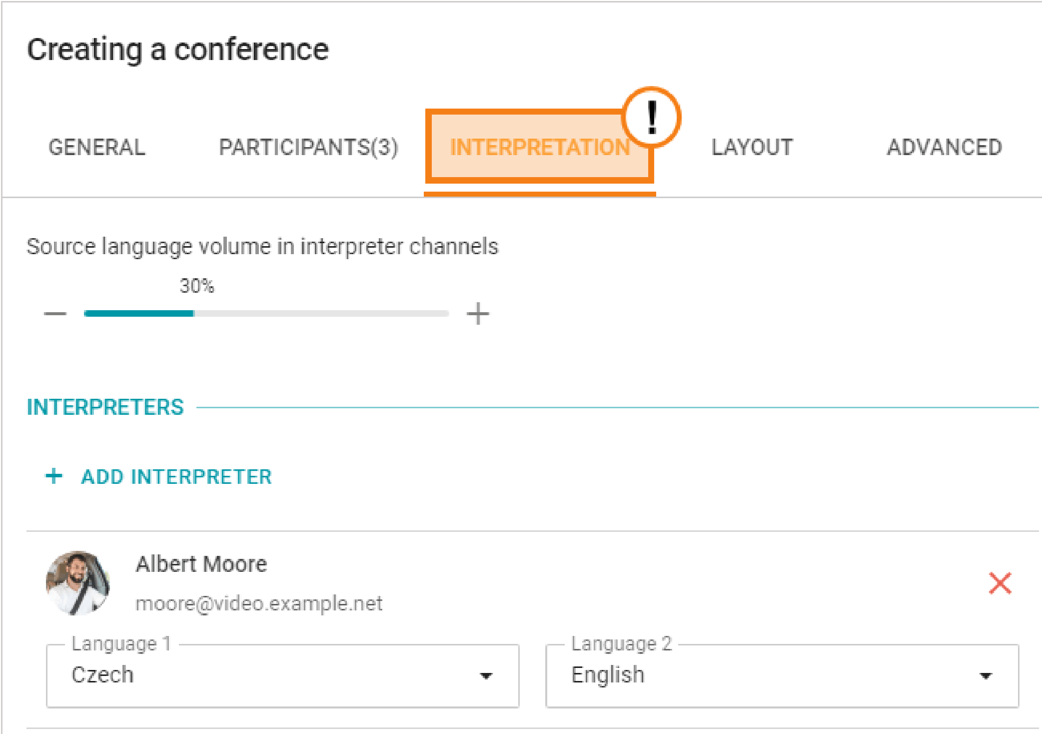
- In the address book
- By using a participant's TrueConf ID
- By entering a call string for an SIP/H.323 endpoint or RTSP device
- Via email (possible only for public conferences).

Apart from adding new participants, you can also appoint any of them as conference moderators. To do it, you need to click the ⋮ button which is next to a participant's name and select the option **Assign as moderator** in the context menu.

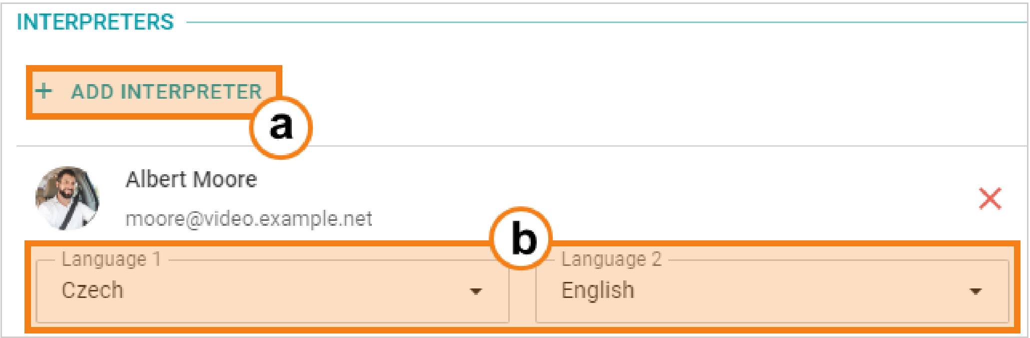
11.3. "Interpretation" tab

> This tab will be available only if you enable **Language interpretation mode** when creating a

This tab will be available only if you enable **Language interpretation mode** when creating a conference.



On this tab, you can assign a conference interpreter (**a**) and select a language pair for this participant (**b**).



Besides, you should pay attention to the volume level of the original audio track (it is set at 30% by default).

11.4. "Layout" tab

In this tab, you can select the default video layout for all conference participants or for each one individually, as well as for SIP/H.323/WebRTC connections.

Layout editing is not available in video lecture mode.

To learn more about the types of video windows in layouts and the specifics of their use, check the TrueConf Server user guide.

To configure the layout, complete the following steps:

1. Select the participants to whom the video layout will be applied. At any time, you can change and/or add the types of connected devices to which the video layout will apply.
2. Specify the type of video layout. If needed, you can create multiple layouts of different types so that it was possible to quickly switch between them.

3. Choose the number of video windows
4. If necessary, select a video window that will be reserved for content sharing.
5. Select a participant for each video window or click **Auto-fill layout** (you can also drag and drop video windows to rearrange them with your mouse). It is also possible to use full-screen mode for more convenient video layout setup. Additionally, the layout can be cleared at any time.
6. If necessary, configure the rotation (alternation) of users in the video layout.
7. Select the location of a participant's display name in the layout (at the top or at the bottom of the video window)
8. If needed, you can check **Do not allow users to change the layout** box.

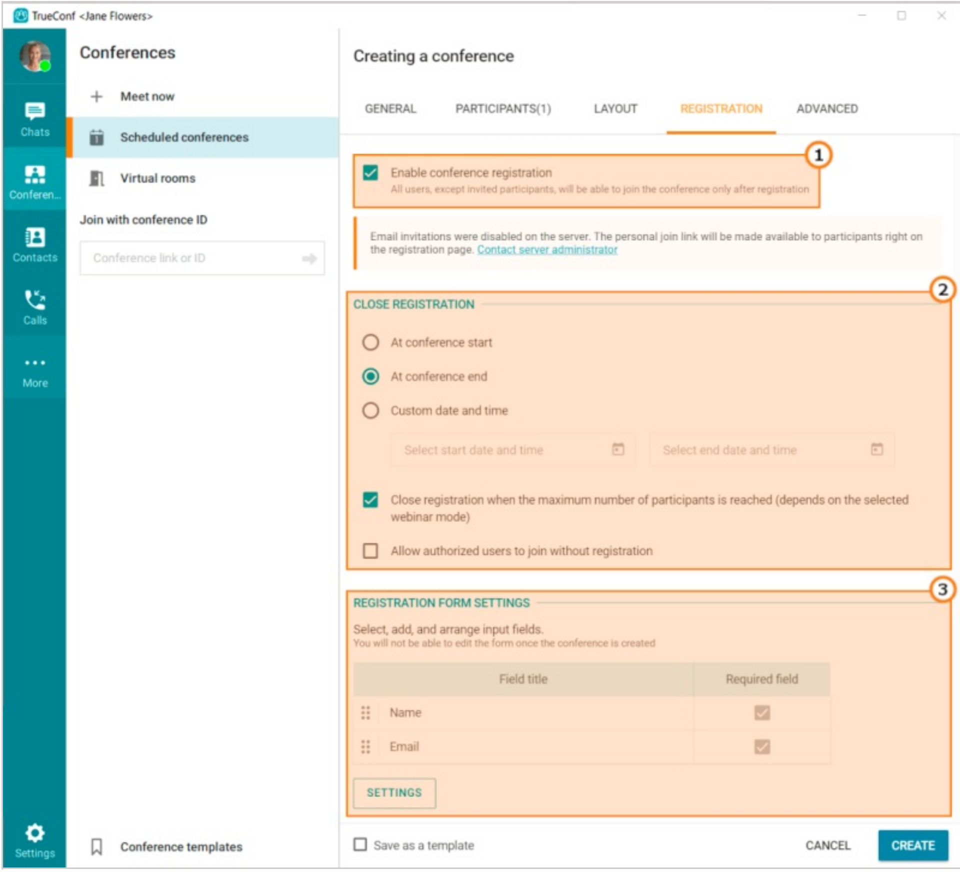
The arrangement of video windows for all participants who should be included in the video layout (everyone in "all on screen" mode and speakers in a moderated role-based conference) is determined randomly by default. In a smart meeting, the video window is provided to an active speaker.

11.5. "Registration" tab

> *i* This tab will be available only when scheduling a public conference.

In the **Registration** tab, you will be able to configure mandatory registration for guest participants. To do it, take the following steps:

1. Check the **Enable conference registration** box.
2. Set the registration parameters: availability period, automatic closing when the maximum number of participants is reached, and ability of authenticated users to join the webinar.
3. Create a custom registration form. To do it, click on the **Settings** button which is at the very bottom of the **Registration form settings** section. There you will be able to select input fields for your form or add custom fields.



i The registration form can be customised only when a conference is created. This feature will be unavailable when the conference is edited.

11.6. "Advanced" tab

In the **Advanced** tab, you can configure the following parameters:

- Conference ID
- PIN for joining a conference (an optional security safeguard which may be helpful when holding a webinar)
- Enable uninvited users to join the conference without asking for permission (available only for private conferences)
- Waiting room for the event
- Limit the number of conference guests (for webinars only)
- Settings for automatically turning off participants' cameras and microphones when they join the conference

* This checkbox will work only for this particular conference. It will not affect users' devices in other conferences or point-to-point calls.

- Disable audio remarks for meeting participants (only in a moderated role-based conference)
- Specify guest permissions (available only for private conferences)

* Learn more about public conferences in our article about webinar security.

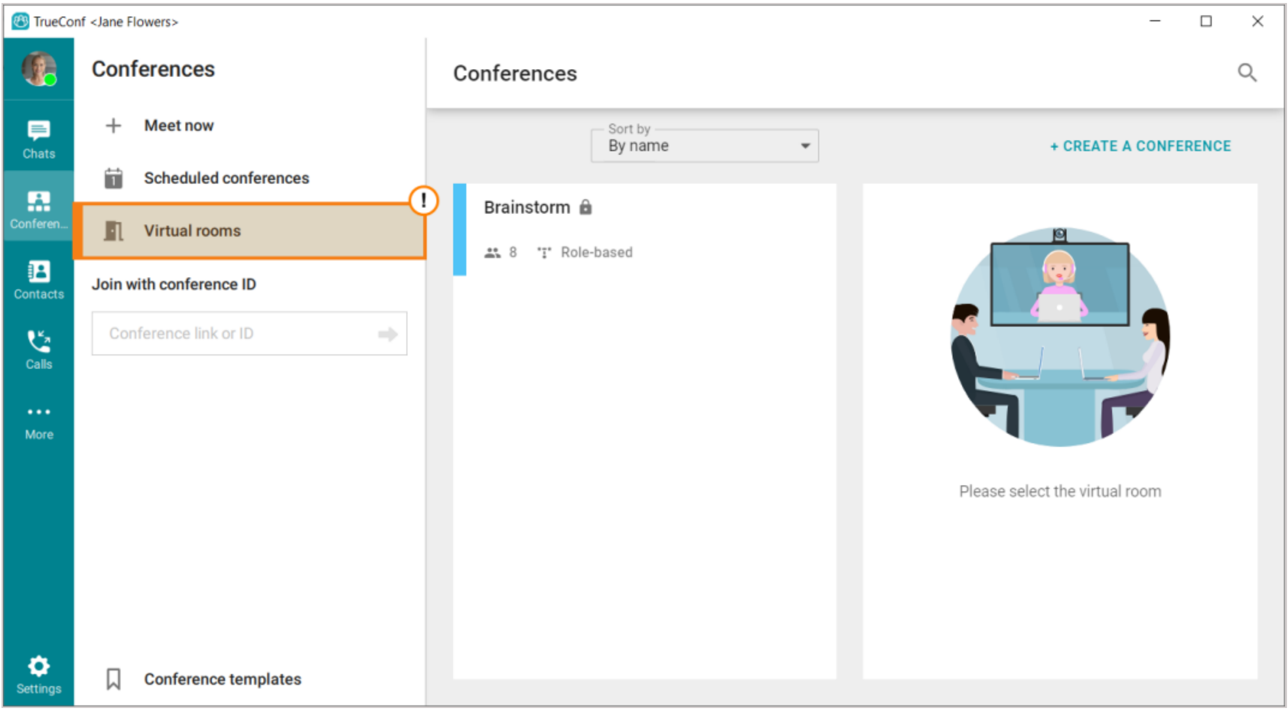
- Record a conference (this parameter can be changed only if recording is allowed on the server side by the owner)
- Send email invitations to conference participants.

> *i* You may not be able to enable conference recording and send invitations if your TrueConf Server administrator has not set up these features.

- Conference control widget.

11.7. Virtual room management

In the **Virtual rooms** section, you will see the list of unscheduled conferences (virtual rooms) where you are either the owner or a participant. Here, you will be able to manage your events or add new ones. When editing the conference, you can also change the start mode of this meeting (either a scheduled conference or a virtual room). To add a conference, click + (**Create a conference**).

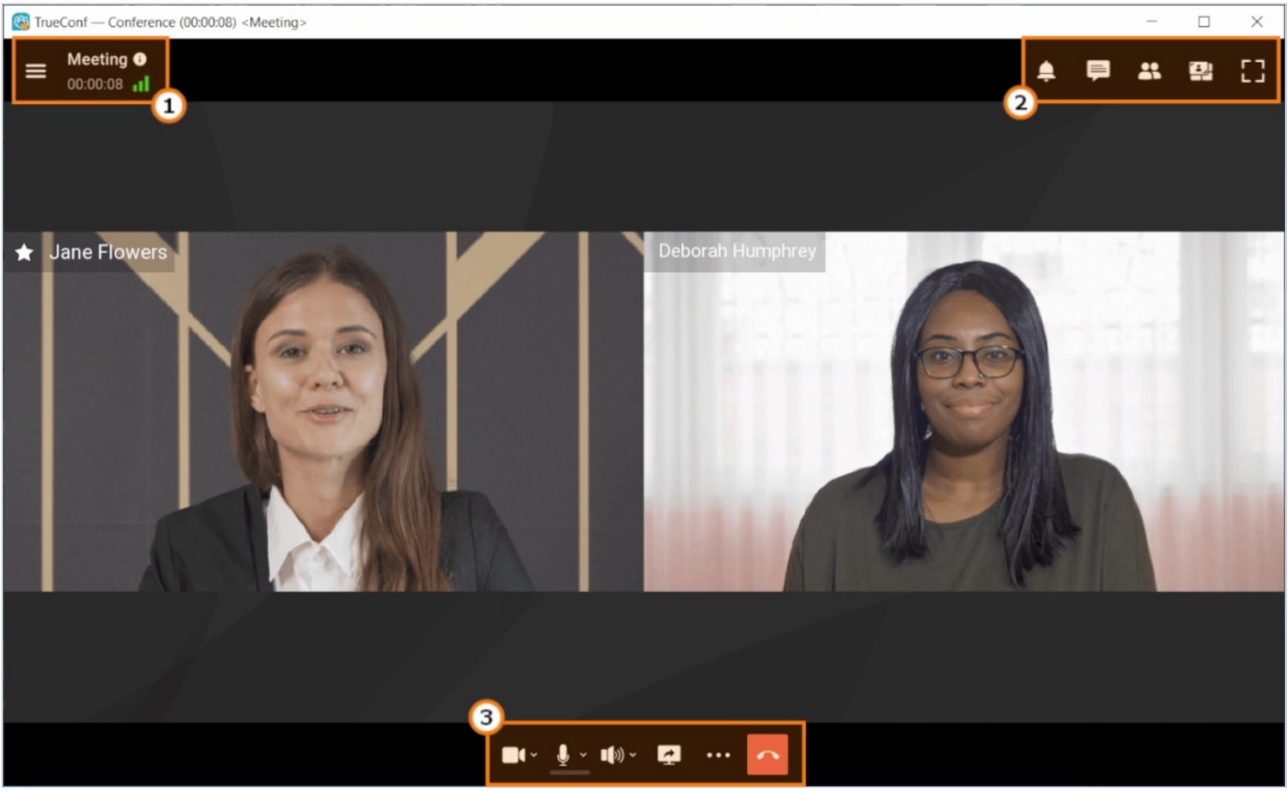


12. Main conference window

The ongoing conference window consists of three main panels:

1. Information panel
2. Go to:
    - Notification center
    - Conference chat
    - List of participants
    - Layout settings
    - Full-screen mode

3. Meeting controls.



In the central part of the window the conference layout will be displayed.

The **Display the conference widget when the application window is minimized** box is checked by default in the application settings. In this case the widget will be displayed in the upper right corner during a meeting if you take one of the following steps:

- Go to any application section where the conference layout is not displayed (e.g., to the settings section)
- Minimize main application window
- Go to another program window (if this window covers more than 50% of the conference window).

The widget provides quick control buttons to manage your meeting and a hidden area to preview the selected video stream (speaker's video or your video).

Learn more about all capabilities available during the meetings below.

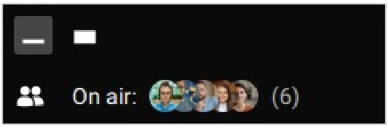
12.1. Video layout

Video layout is the arrangement of users’ video windows during a group video conference.

Video window is a part of the screen where a participant’s video or shared content is displayed during a video call or conference (this window may also include the participant's name and status icons).

During a conference users can change the video layout on their own in TrueConf client applications. Moderators can also change the layout (for individual participants, SIP/H.323 devices and users connected from a browser) in the real-time meeting management section.

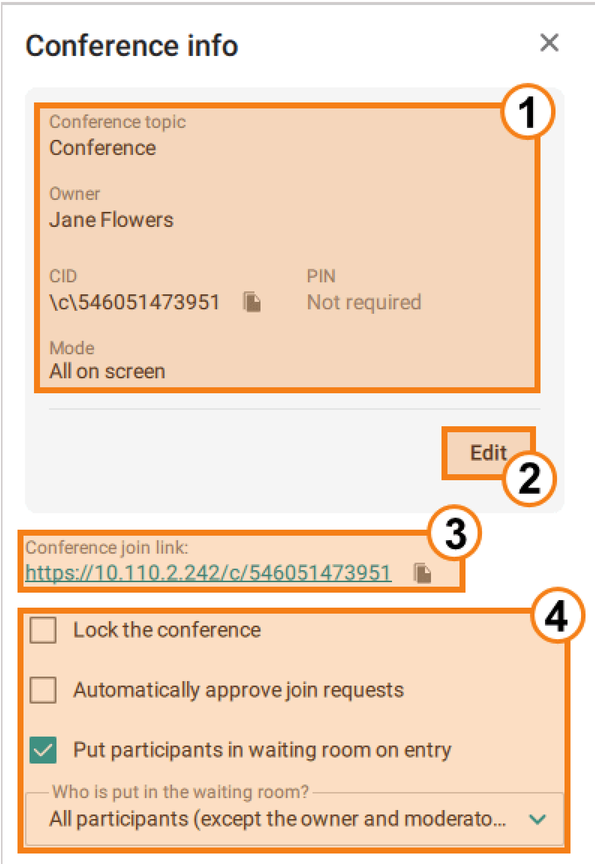
The list of users who have joined the video conference, but are not added to the layout, will be displayed in the **On air** widget.



12.2. Conference info

Click on the button on the information panel to view the conference information.

In the **Conference info** window, you can:

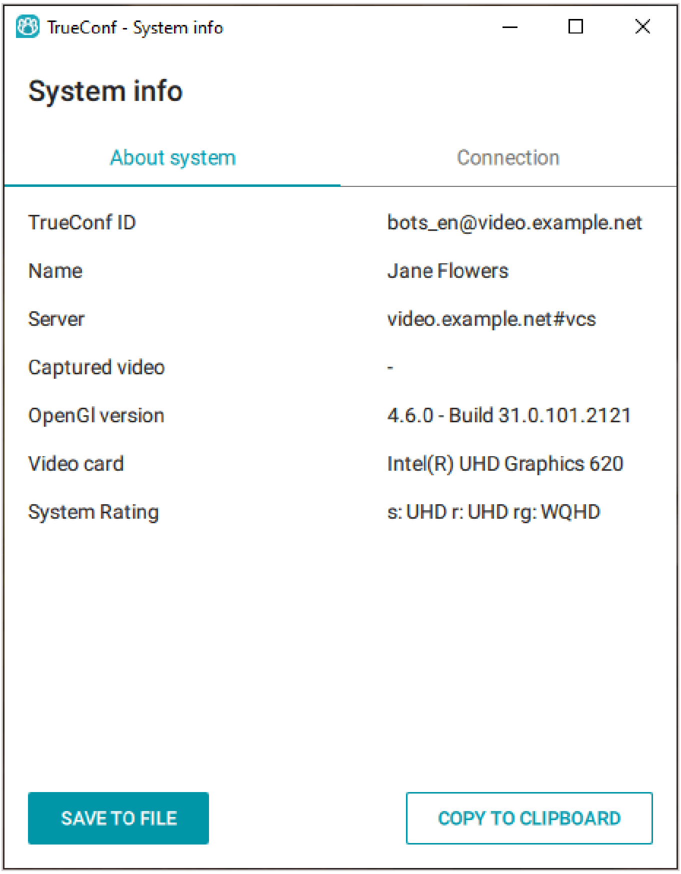


1. Find the main information about the conference: **Conference topic**, **Owner**, conference ID (**CID**), conference PIN (can be quickly copied to clipboard) and **Mode**.
2. Start editing the information listed above.
3. The **Conference join link** sub-section where you can quickly copy the URL to your conference and share it with others. To copy the conference join link to the clipboard (e.g., if you want to send it via email), use the button.
4. The checkboxes that enable you to restrict access to the conference, allow users to join the conference without asking your permission, or direct new participants to the waiting room. If the last checkbox is activated, you will be asked to select the group of participants who will be put in the waiting room.

Click on the button that will open the window with two tabs. On the first tab, **About system**, you will find detailed information about your hardware. On the second tab, **Connection**, there will be data about outgoing and incoming connections.

If necessary, you can save the connection quality report with one of the two buttons:

1. **Save to file** to export information in the .txt format.
2. **Copy to clipboard** for sending it in any convenient way.



> Information about the software and hardware is also available in **Settings →More →System info**.

12.2.1. System rating

The system rating indicates the maximum resolution for the following video streams: the video you send to a conference (**s:**, e.g., FullHD), incoming video (**r:**) and the maximum resolution of the video layout during a conference (**rg:** e.g., WQHD or 2560×1440).

12.2.2. Changing the conference mode on the fly

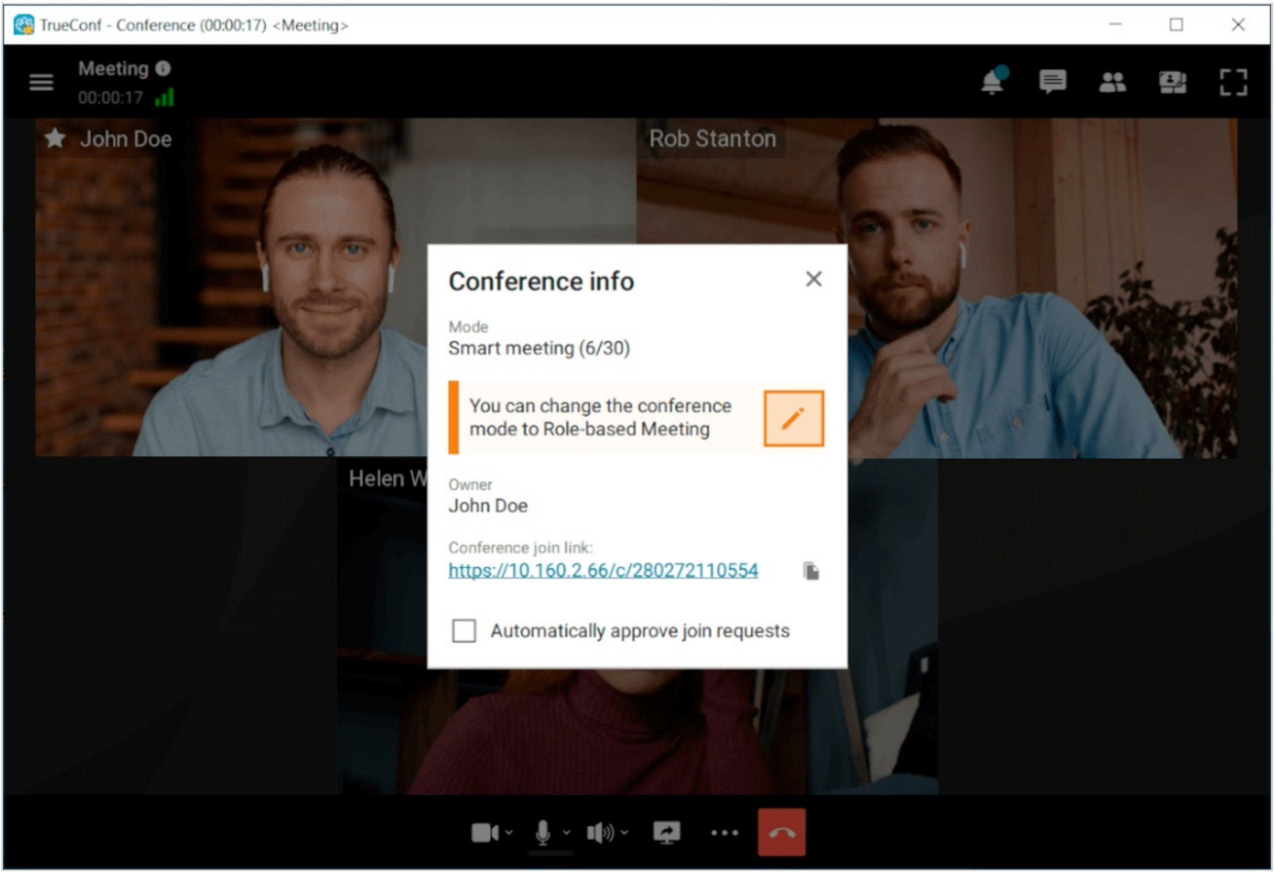
A conference in **Smart meeting** mode can be switched to **Moderated role-based** mode on the go (no need to interrupt the conference). Similarly, a moderated role-based conference can be switched to a smart meeting on the fly.

> A moderated role-based conference with less than 4 spots on the podium cannot be switched to a smart meeting.

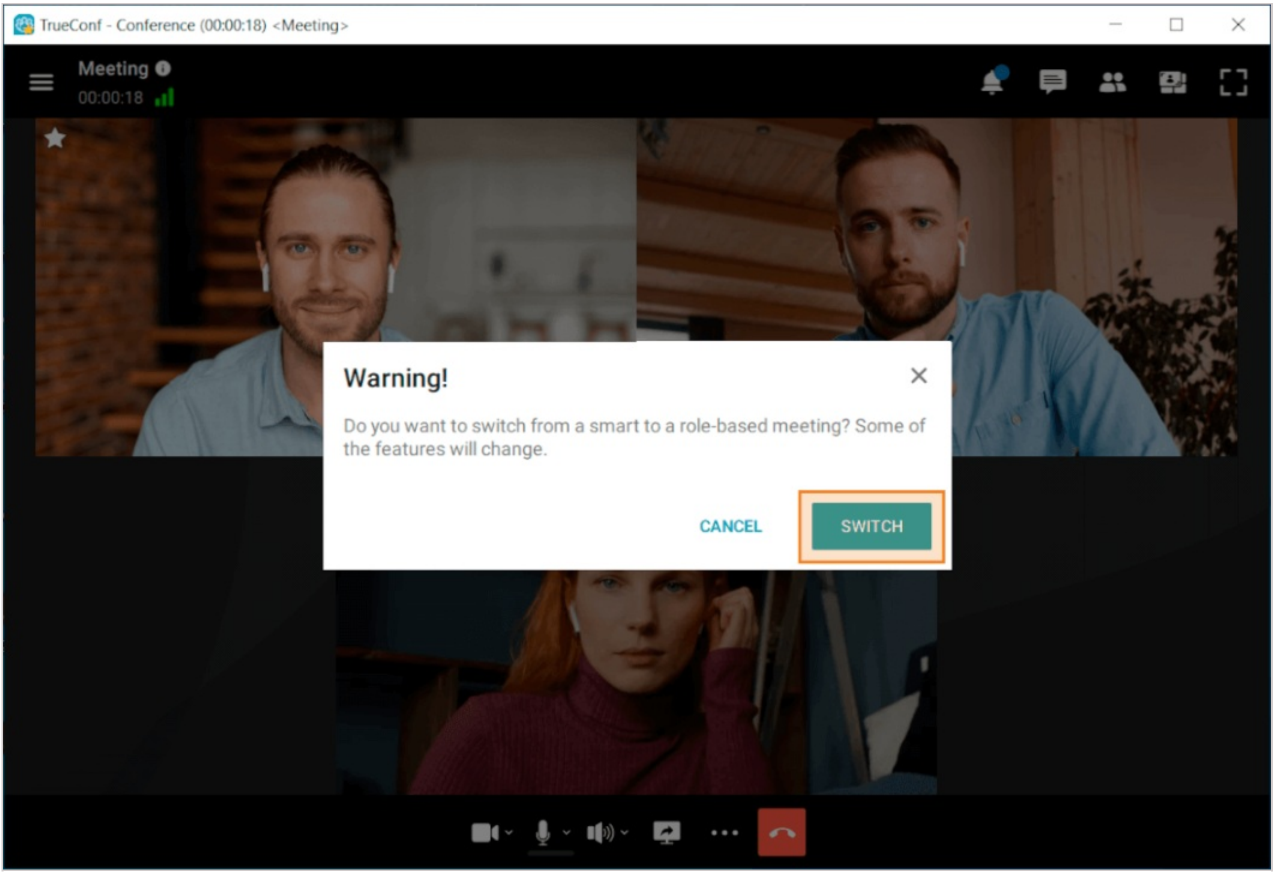
To do it, take these steps:

1. Click on the ⓘ button in the upper left corner of the video conference window.

2. Click on ✏ in the new window.

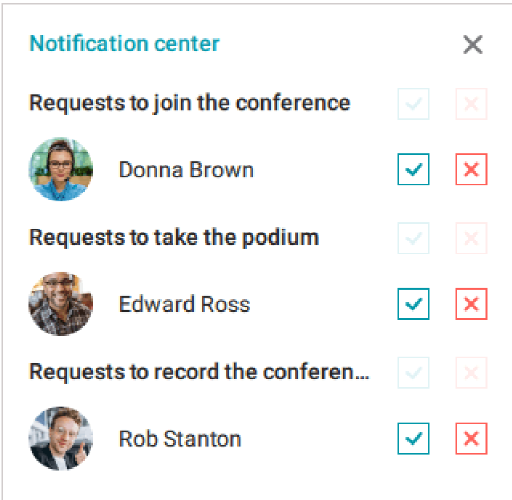


1. Next, click on **Switch**. Your conference will be switched to a different mode (from a smart meeting to a moderated role-based conference or vice versa).



12.3. Notification center

Certain types of requests and notifications will be displayed in the notification centre. The button will have a counter indicating the total number of unread notifications: . Requests and notifications are sorted by their type and priority.



Notifications display in order of importance to the meeting moderator:

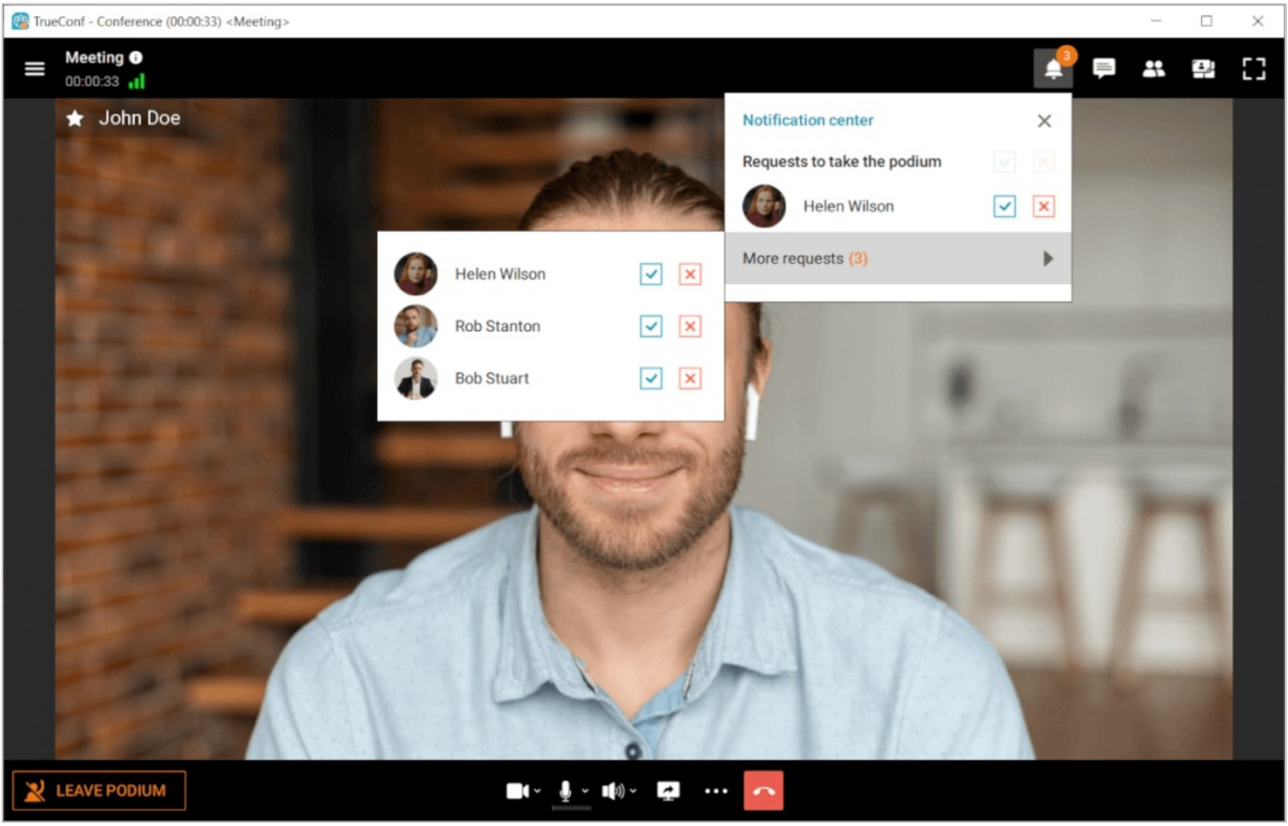
1. **Requests to join the conference**
2. **Requests to take the podium**
3. **Camera control requests**
4. **Remote desktop control requests**
5. **Recording requests**
6. **Notifications** (unavailable users, rejected podium invitations, etc.)

Notifications display in order of importance to a meeting participant:

1. **Invitation to the podium**
2. **Camera control requests**
3. **Remote desktop control requests**
4. **Recording request**
5. **Notifications** (rejecting a call or podium request, etc.)

Within groups, notifications are sorted by the time of receipt.

In case of requests, earlier requests are shown at the top. In case of notifications, later notifications are shown at the top. Up to two notifications/requests are displayed in each group. If there are more alerts, then a drop-down list **More requests** or **More notifications** is shown under the first notification. You can click on this list to view the rest of alerts.



There are certain rules for hiding the request in the notification center.

Automatically:

- In 100 seconds after the alert has been received
- The request will be hidden if another moderator replies to it or if it is resolved automatically as a result of a counter request.

Manually:

- If you have clicked the **Accept** or **Decline** buttons
- If you have clicked the **Accept all** or **Reject all** buttons for a group of requests.

You can hide notifications only manually.

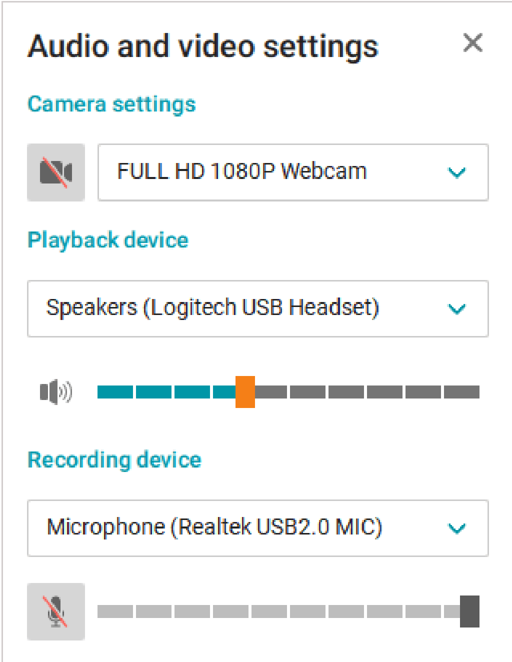
12.4. Managing devices during a conference

12.4.1. Audio and video settings

During a conference, you can not only turn on/off the participant's camera or microphone but also select the AV peripherals from the list of user's available devices.

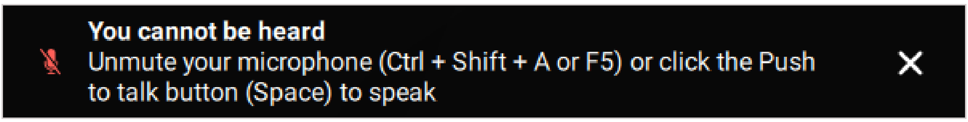
If your microphone is muted, you can still send an audio remark at any time (except the cases when you are in a video call or a smart meeting) with the **Push to talk** button available in the conference control panel (and with shortcuts **CTRL + T** or **Space**) as it is shown in the example for a moderated role-based conference.

To select a different camera, speakers or microphone during the meeting, click the ••• button displayed next to each device icon and select the device. You can also click on the ••• button and go to **Audio and video settings**.



You can select a different camera by clicking on the button available in the self-view window. To activate background blurring click .

If other participants cannot see or hear you during a conference, check whether your camera and microphone are on. In case if the microphone is off, you will see a corresponding message at the bottom of your conference window.

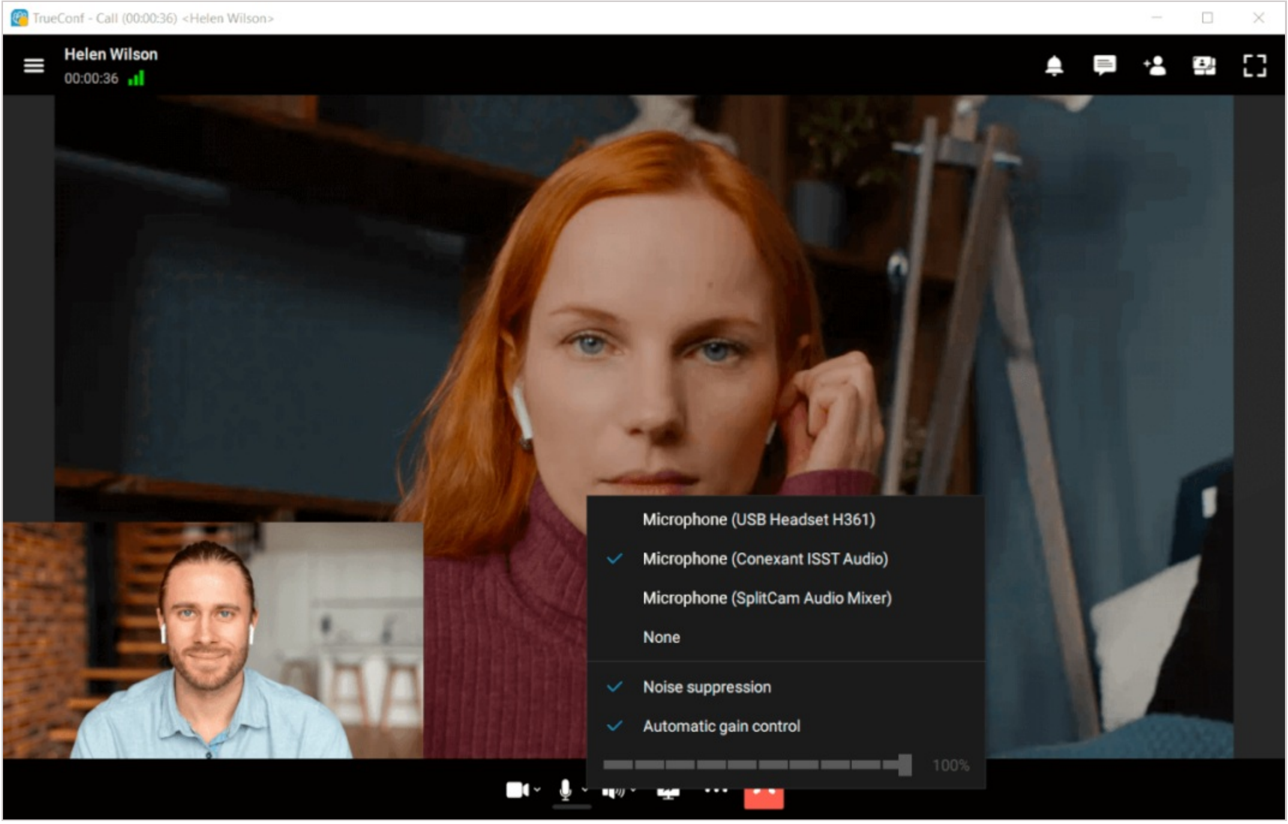


To turn on your camera or microphone, click on the corresponding buttons and at the bottom of the conference window.

You can also change some of the camera parameters by right-clicking on your self-view or video window during a conference. It is possible to configure background blurring, virtual backgrounds, face tracking, and the camera which is being used at the moment.

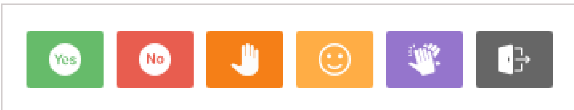
12.4.2. Noise cancellation

TrueConf client application uses AI-based noise-cancellation algorithms allowing meeting participants to stay focused on their discussion, rather than the surrounding noises. All external sounds of any volume (even the sounds of construction tools or air fan noises). To activate this feature click on the button which is next to the microphone icon in the meeting control panel. In the new menu, mark the **Noise supression** option. You can also enable this feature in the **Settings →Audio and Video →Audio** menu.



12.5. Reactions and polling

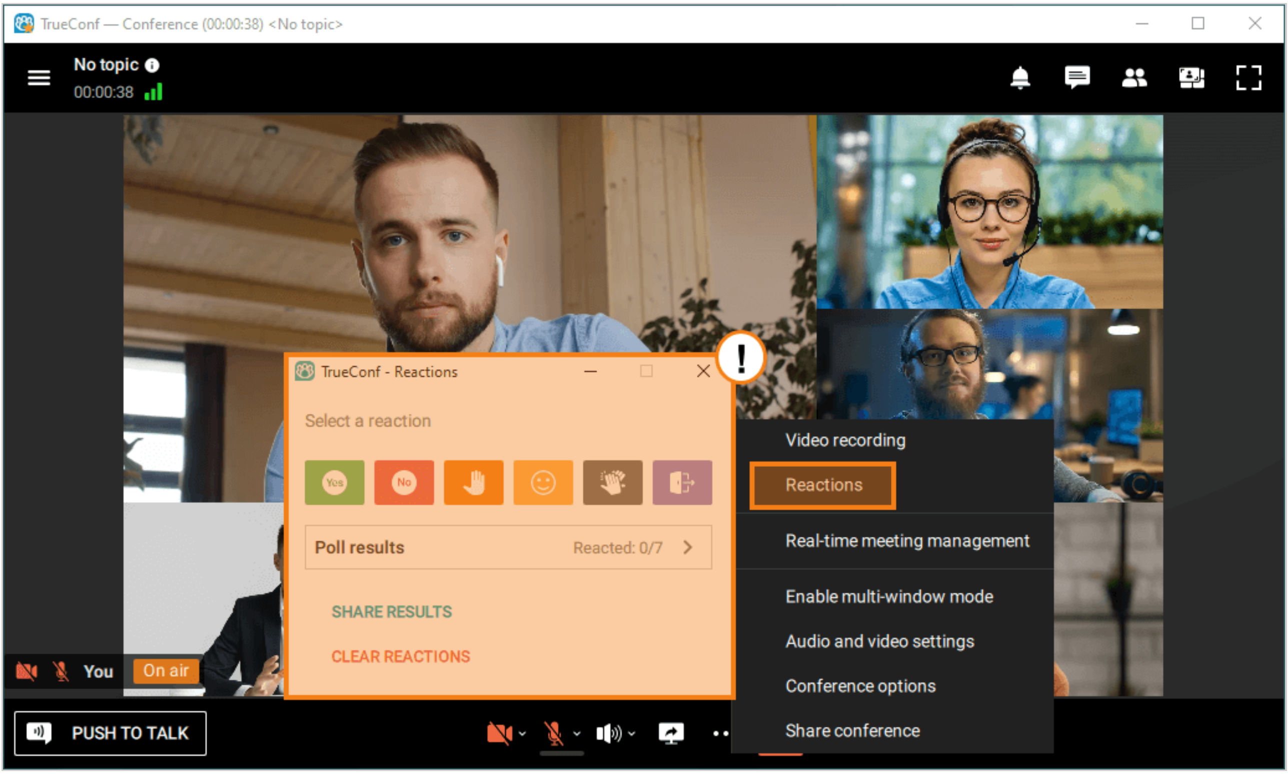
During conferences you can ask participants to take and participate in polls using reactions:



*

Reactions and polling do not directly affect conferences. Instead, they serve only as an additional means of sharing information between participants. This mechanism can be used to express your opinion during a video conference without making audio reply.

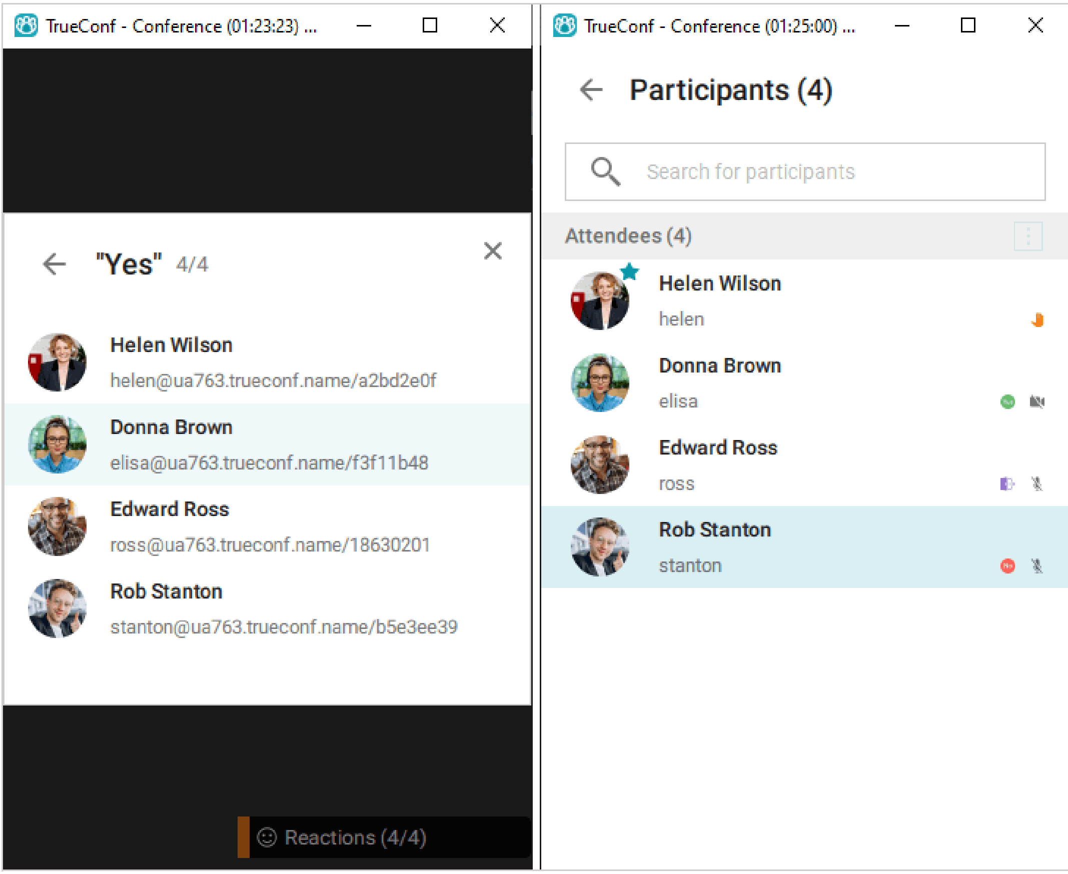
You can set the reactions in the conference control panel. Click on the button , go to **Reactions**—and select the reaction you want. If required, the reaction can be changed (simply by choosing another one) or reset (using the button below).



Next to the reactions, you can see the **Reacted** counter that displays the number of participants who have already reacted or taken poll.

> *i* Please note that “Yes” and “No” statistics is calculated taking into account all conference participants (not only those who voted). For example, if one attendee votes “Yes” and other attendees do not vote, then “Yes” will still have only 20% in a conference for 5 users.

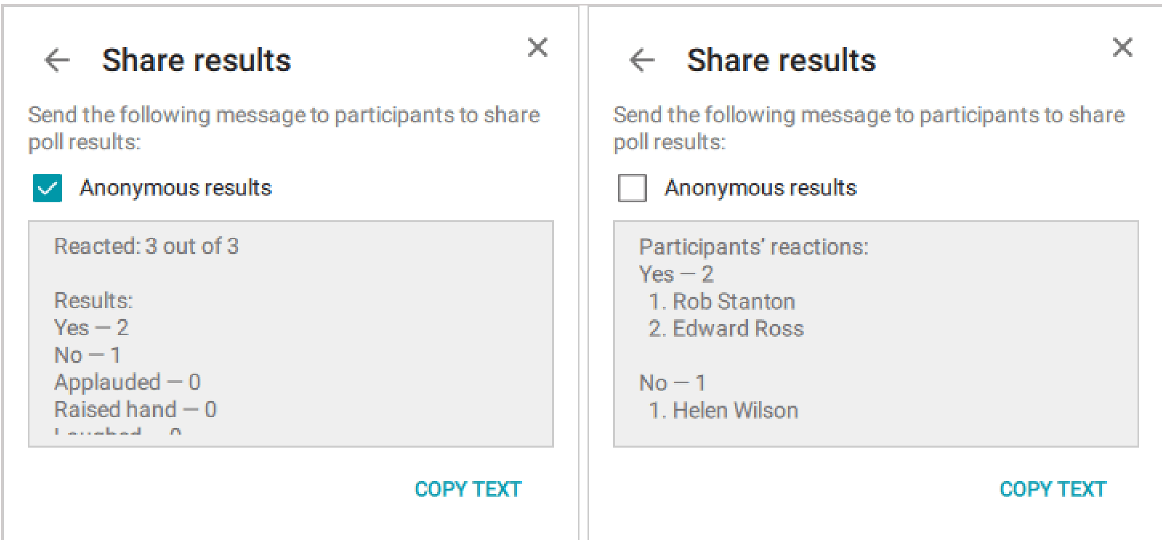
You can view reaction of each user separately. Their reactions are displayed both in the list of participants and right in the reaction menu.



The conference moderator can clear all the reactions posted by other participants. To do it, click **Clear reactions** displayed at the bottom of the reaction menu.

In this menu, the moderator can also save the reaction stats. To this end, click **Share results →Copy text**.

> *i* Uncheck the **Anonymous results** box to upload detailed stats showing user votes.



13. Conference management

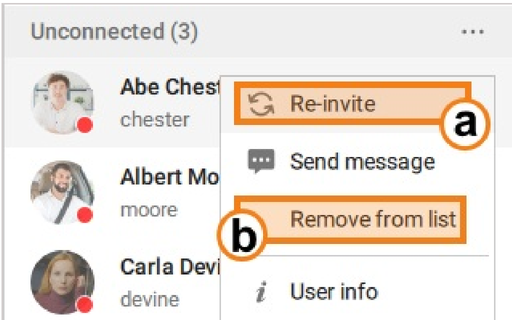
13.1. Inviting users to the conference

You can add participants from your address book right when creating a conference as it is described in the corresponding section.

Moreover, if you are the moderator of an ongoing conference, you can invite participants to join it. There are three options to do so.

1. Go to the list of participants using the button and click **Add participants**.
2. If you call any user during a conference, this user will be invited to join your current conference.
3. If you are the conference owner or have operator rights, you can go to the real-time meeting management section, open the context menu (**a**), navigate to **Participant List**(**b**), and invite users by clicking the button + which is on the right side of the search bar (**c**).

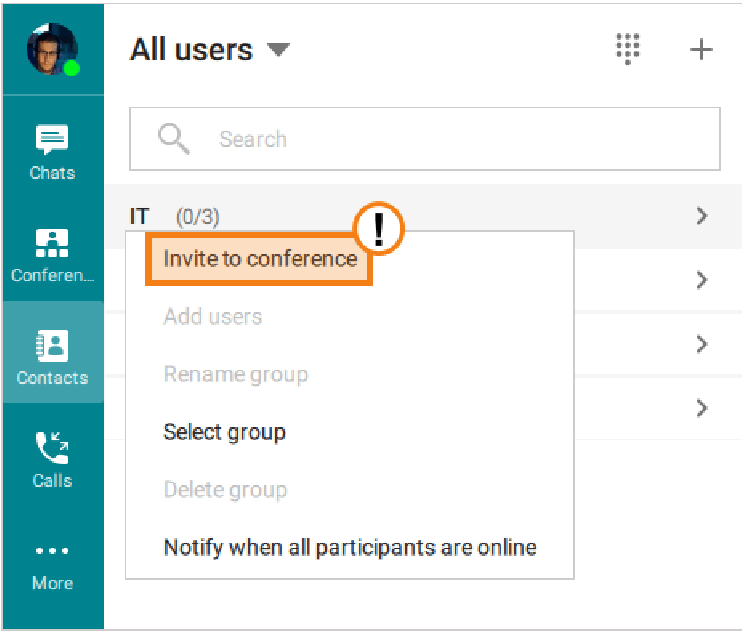
The participants, who have not joined the conference, will be displayed in the separate **Unconnected** group. You will be able to re-invite them (**a**) or remove (**b**) any of them from the meeting by selecting the corresponding option in the context menu; to open the menu right-click on a participant:



You can also clear the entire list at once by using the corresponding option in the menu which can be opened by clicking the ••• button:

13.2. Inviting a user group to the conference

To add a user group to a conference, go to the group list display mode and click **Invite to conference** in the group context menu. You will enter the conference creation menu.

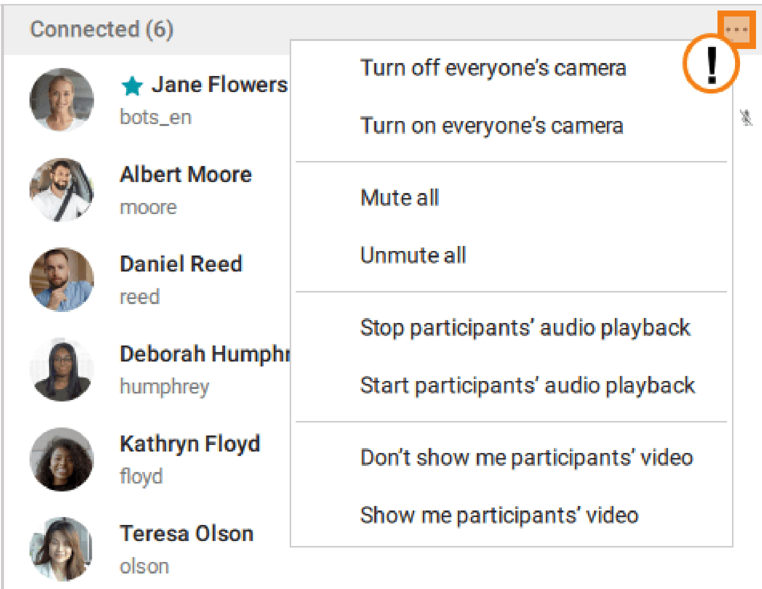


In the same way, you can invite the group to an active video meeting if you are the meeting moderator.

> *i* To add a new participant or group without leaving the conference window, you need to go to the list of conference participants and click **Add participants**.

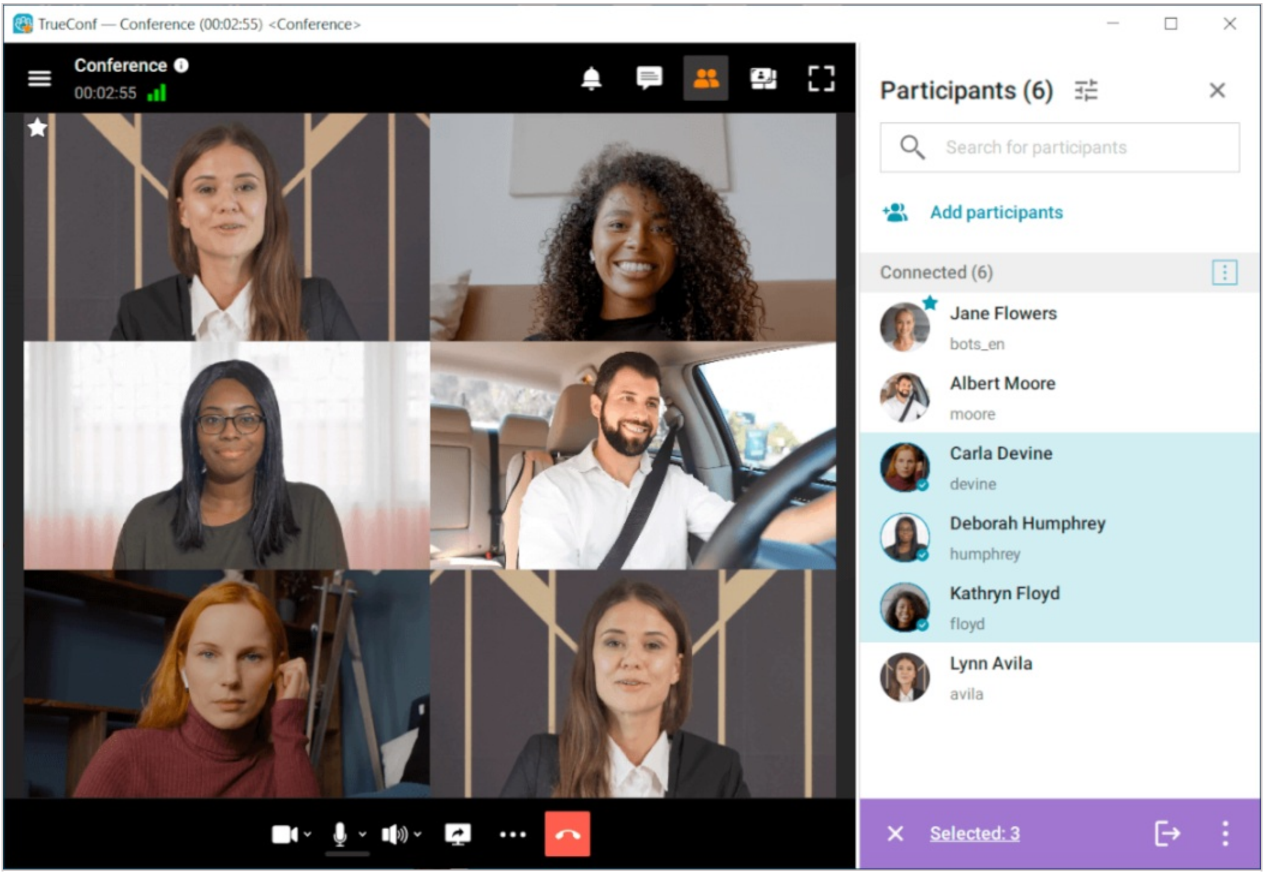
13.3. User group actions

Click on the button ··· to select the required action over conference participants.



The same button is available for the list of users who did not join the conference. It will allow you to re-invite all them to the meeting.

You can also select the participants to whom an action should be applied. To select a participant, right-click on this user's avatar in the list.



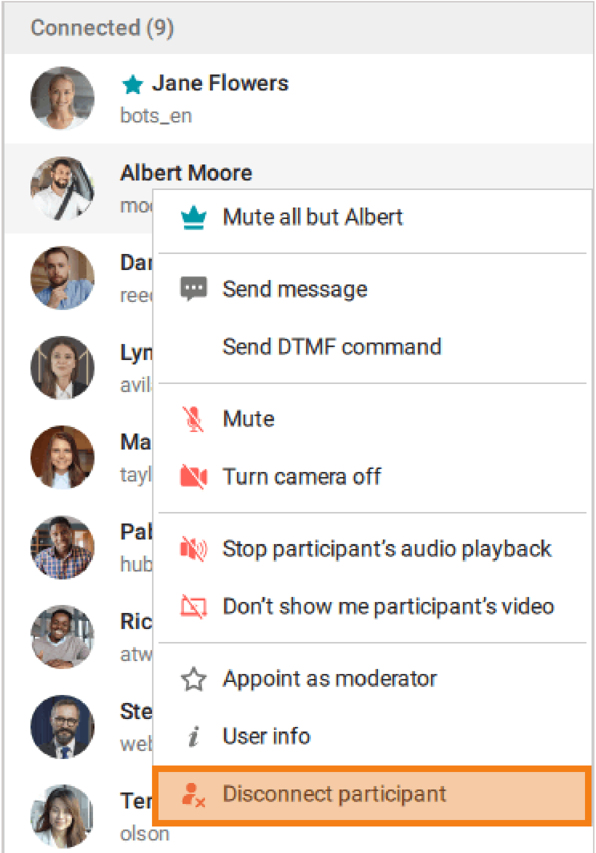
You can use the button to sort participants by these criteria:

1. Alphabetically. There are two options: ascending order (A-Z) and descending order (Z-A).
2. By role. The conference owner is displayed first, followed by appointed moderators and ultimately by users without a role (attendees).
3. By position in the layout. In this case, the order of participants in the list will be linked to the position of their video windows. If the window position changes, the participant will be moved in the list.
4. By microphone status. In this case, the participants, whose microphone is unmuted, will be displayed above others. Each sub-group will be sorted alphabetically.

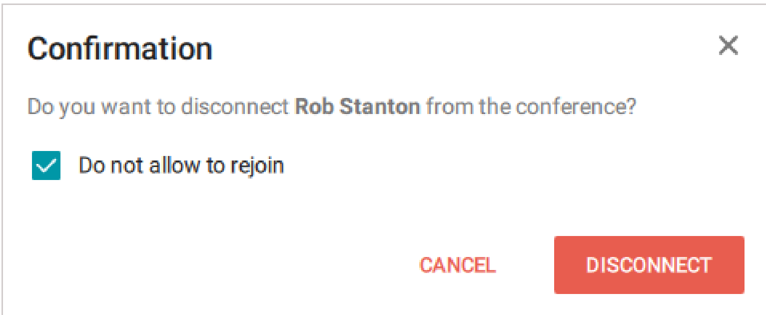
Additionally, you can check the **Track participant activities** box. In this case, participants, who are performing certain actions (e.g., speak or share content) will be displayed above others.

13.4. Disconnecting participants

The moderator can disconnect a participant or another moderator during a meeting (removing the conference owner is unavailable). To this end, right click on the user name and select **Disconnect participant** in the list of conference participants (don't forget to go to the list of participants rather than the address book).

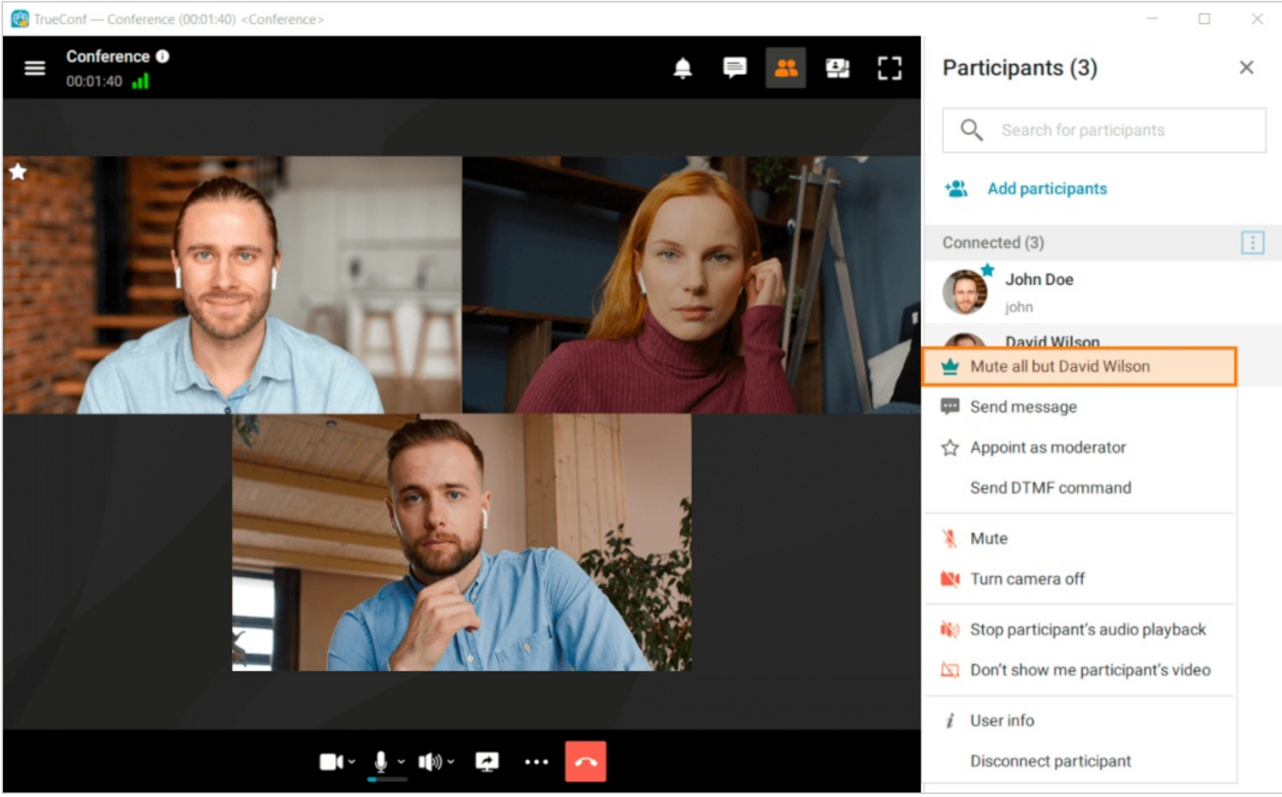


You will need to confirm the removal of a participant by clicking on the corresponding button. Please note that if you have marked the **Do not allow to rejoin** box, the user will be unable to join this meeting later.



13.5. Appointing a single speaker

During a conference you can appoint a conference participant as a single speaker. To do it, right-click on this user in the list of participant and select the **Mute all but [name]** option in the context menu; here **[name]** is the name of the selected participant.

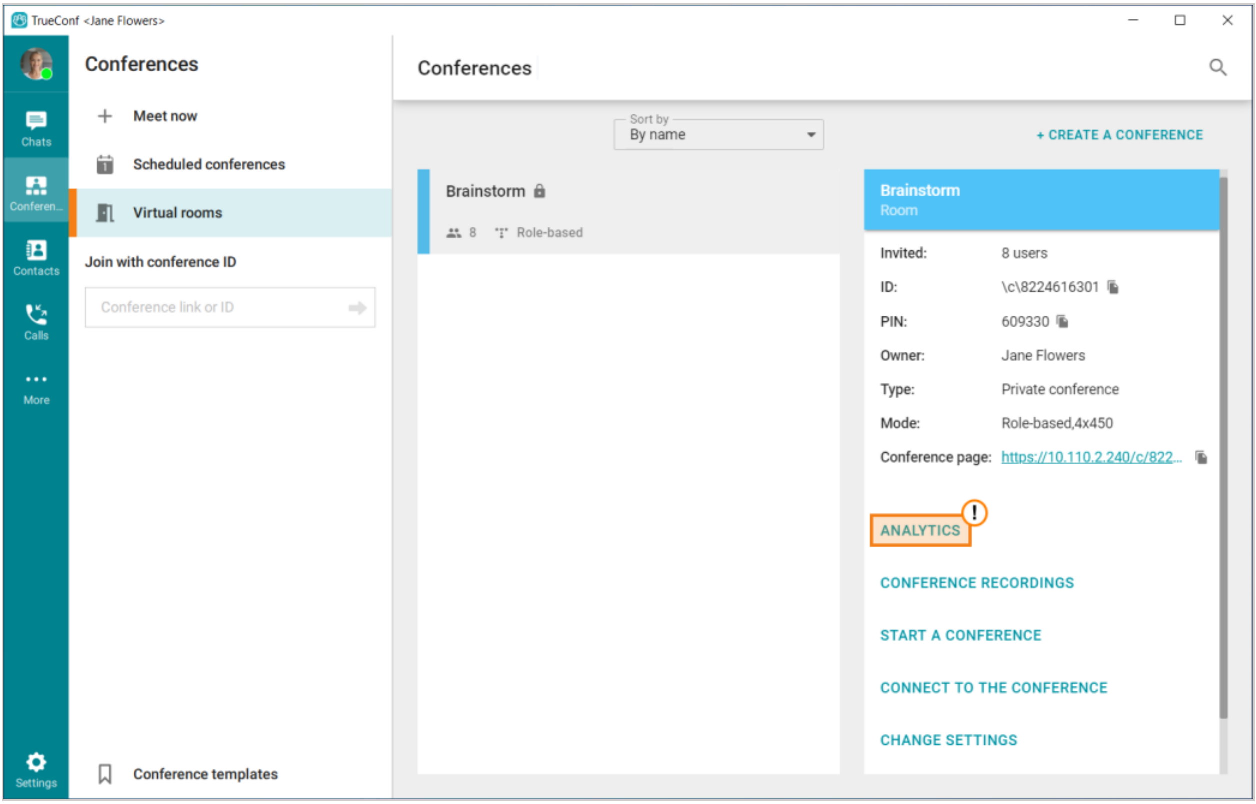


This command will unmute the microphone of the selected participant, while other participants' microphones will be muted.

13.6. Conference analytics

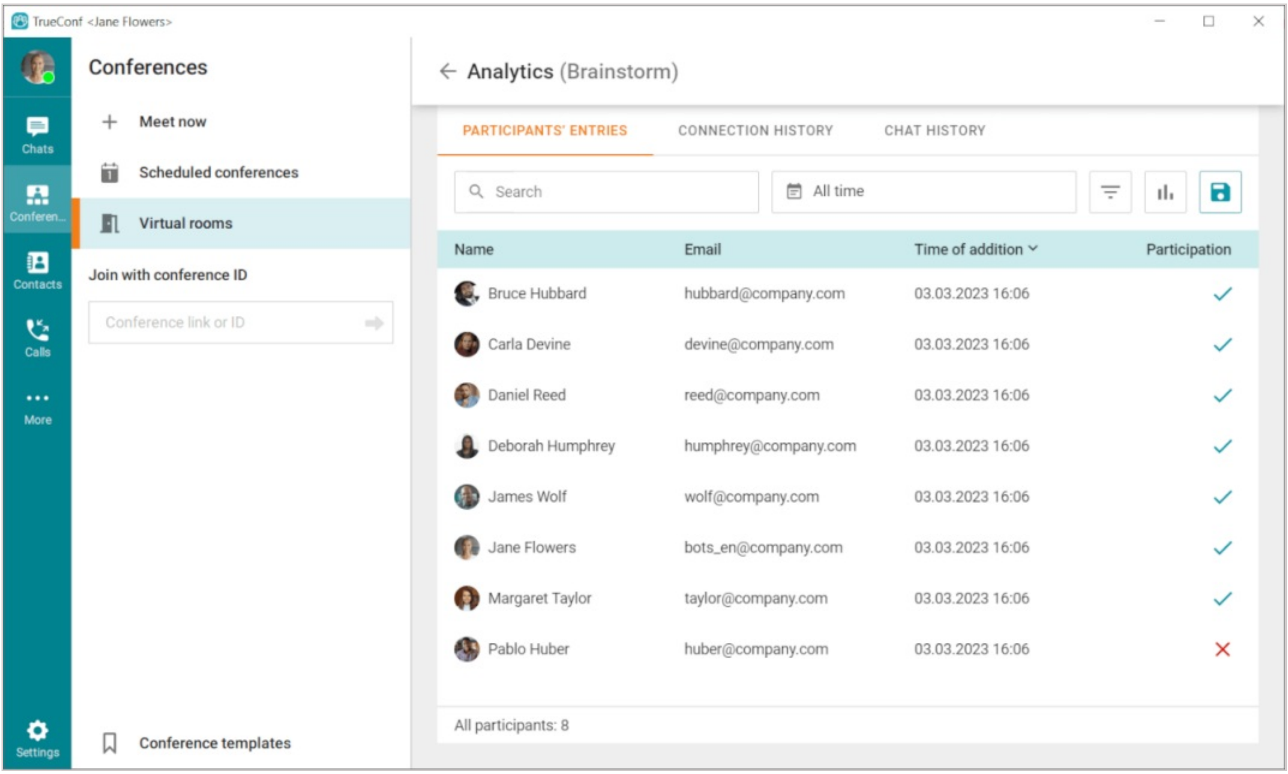
The conference owner can check detailed information about participants and their activity during the event. To do it, you will need to:

1. Click on the button in the application menu to access the **Conferences** section.
2. Select the list of conferences depending their start mode: **Scheduled conferences** or **Virtual rooms**.
3. Click on the conference for which you want to check the analytics.
4. Click on the **Analytics** button in the conference card.



5. In the analytics section, you will be able to check the following data:
    - Information about participants
    - Connection history
    - Messages sent to the common chat.

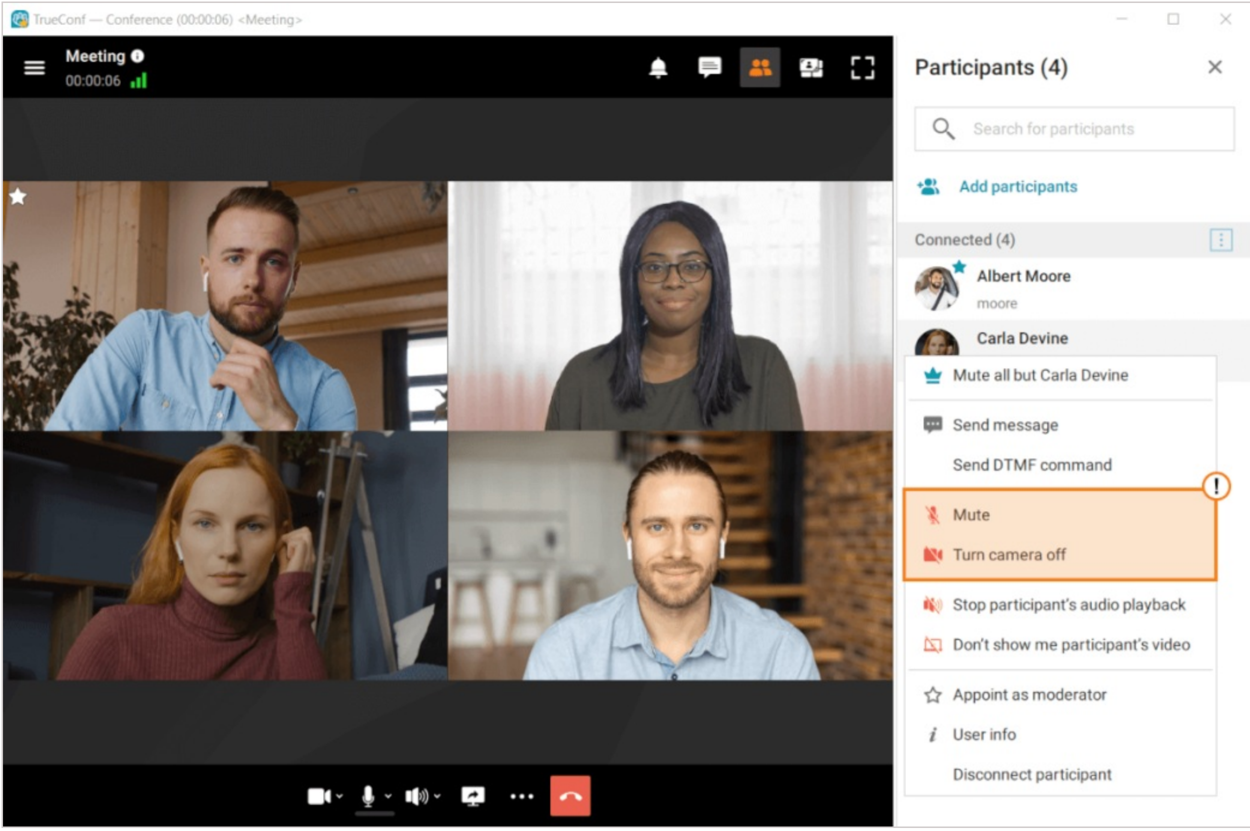
It is also possible to search within these data and apply filters. If necessary, any list can be saved to a csv file. To do it, click on the  button.



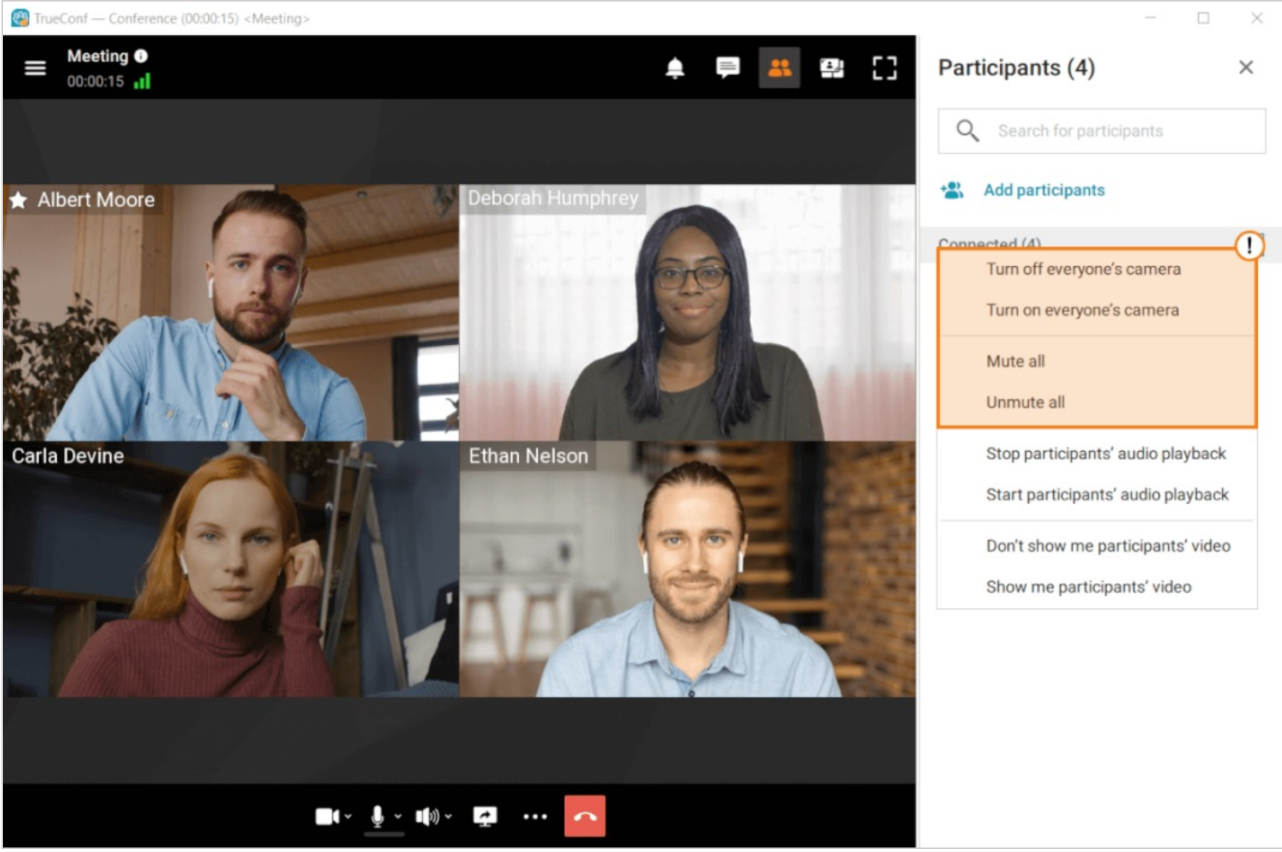
13.7. Managing participants' AV devices

During a conference a moderator can control participants' audio and video devices. To do it, take these steps:

1. Click on the in the upper right corner of the conference window.
2. You will open the list of participants. Right-click on the selected user.
3. The context menu will include multiple options for controlling the participant's devices.



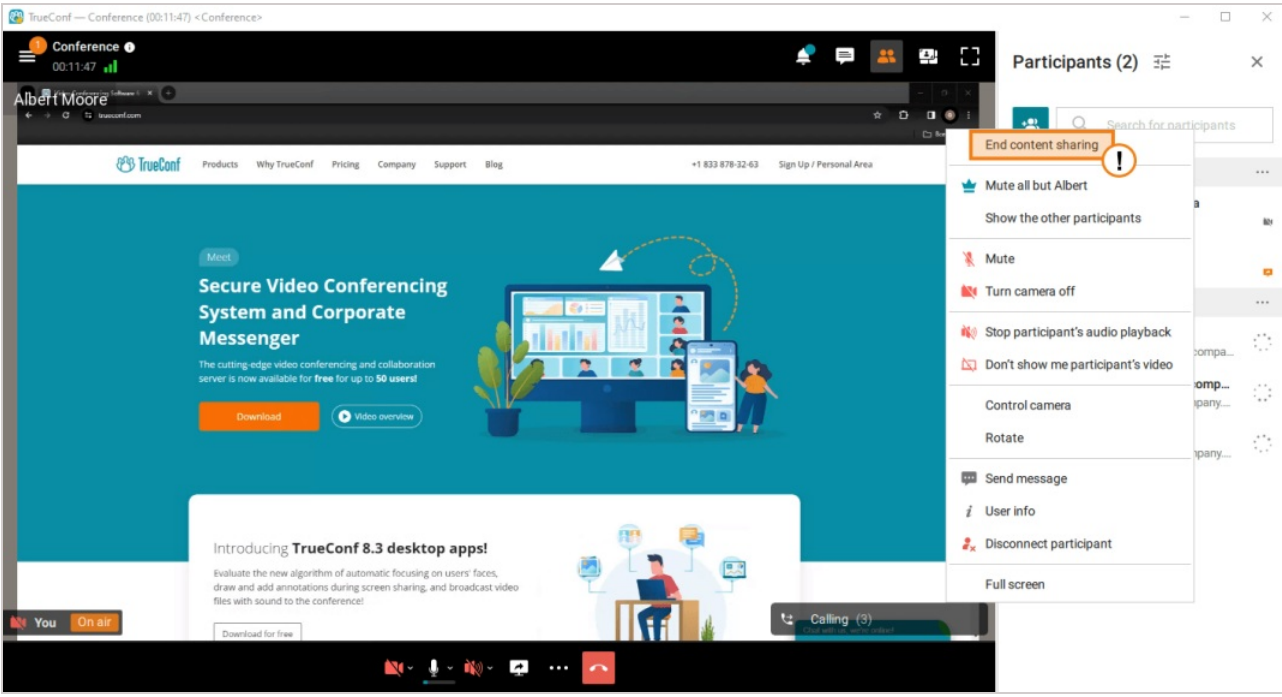
It is also possible to control the devices of all participants. Click on the button ··· in the upper right corner of the list and select the required option in the context menu:



It is also possible to fine-tune participants' devices (select the appropriate camera or microphone or control the microphone gain). To do it, go to the real-time meeting management section and follow the steps described in TrueConf Server user guide.

13.8. Management of conference participants' desktop sharing

A moderator can also end screen sharing by other participants at any time. To do it, the moderator has to right-click on the window with the shared content and select the **End content sharing** option.



The participant whose content sharing was ended will receive the notification **"The moderator has ended the broadcast of your content"**.

13.9. Changing the conference PIN and ID on the fly

During a conference, a moderator can change its PIN and ID (unique identifier). This precaution be useful to further secure the conference against unauthorized access when all invited participants have already joined the conference. One can do it in two ways: First:

1. Go to the real-time meeting management.
2. Click on the button ⋮.
3. Select the required option and specify the new PIN or ID. It is possible to automatically generate a PIN and set a new one if it was not specified before. Additionally, you can delete the PIN.

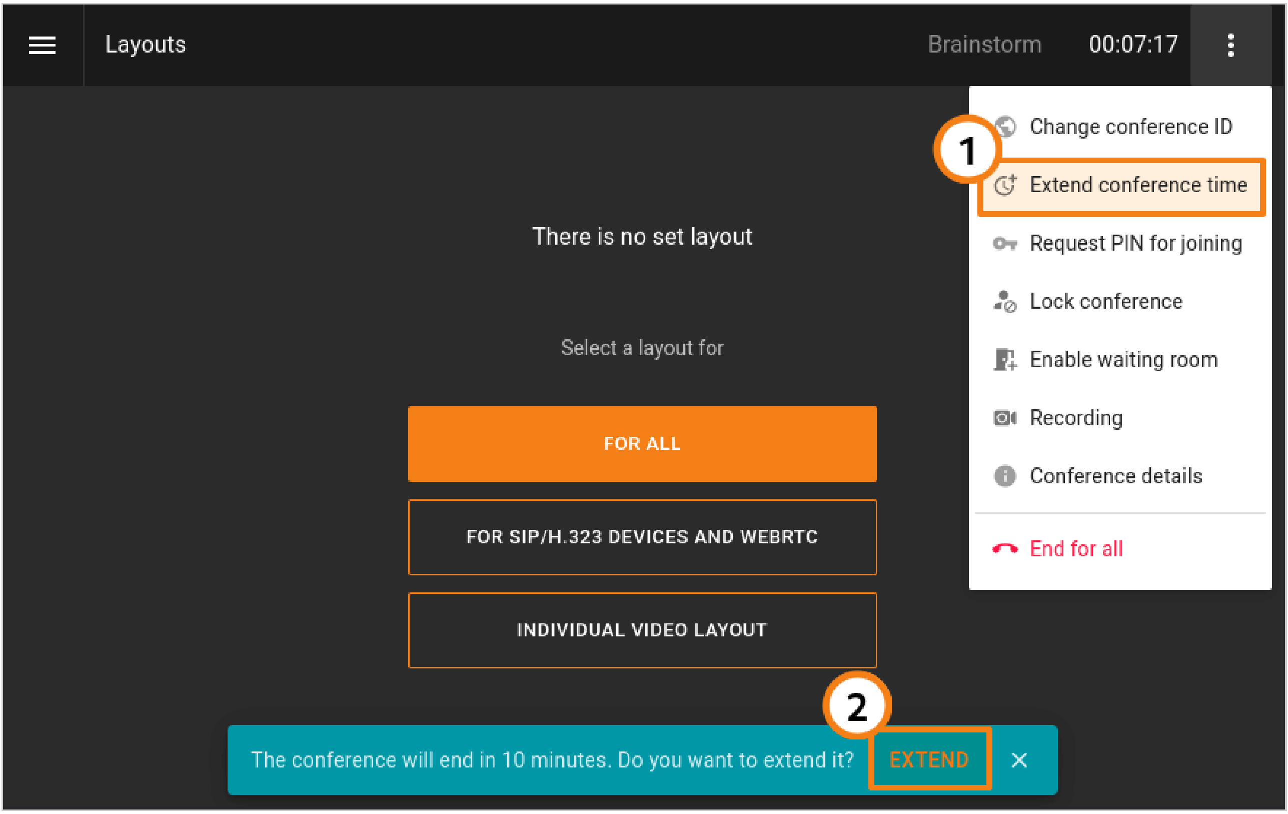
> The owner can change the PIN of a conference even without joining it (without being included in the list of participants). The corresponding option will be available in the conference card when selecting this event in the list of meetings either in the client application scheduler or in the personal area.

Second:

1. During a conference, click **Conference settings** ⓘ.
2. Click the **Edit** button in the pop-up window.
3. Enter new information and click **Save**.

13.10. Extending a conference

If the option to extend the conference was enabled when **scheduling**, all moderators will be able to increase the duration of the event. This can be done in two ways through real-time meeting management:



1. Click the ⋮ button in the upper right corner and select the **Extend conference time** option.

2. If you activated the notification about the upcoming conference end (check the corresponding box), an alert with the **Extend** button will be displayed at the bottom of the control window.

13.11. Locking the conference

A moderator can lock the conference for new participants at any moment. This meeting will be unavailable to new participants either temporarily until it is unlocked or up to its ending.

You can lock a meeting in one of these ways:

- Select an ongoing conference in the scheduler and click on the **Lock conference** button in the conference card
- Go to the real-time meeting management section, click on the button and select **Lock conference**.

When a conference is locked

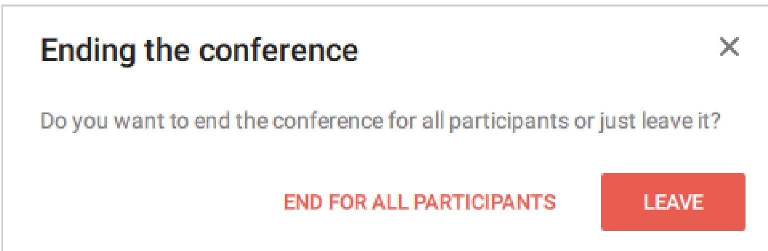
- it ***can*** be joined by:
  - moderators (including the owner)
  - operators
  - users who will be explicitly added by the moderator (including those users who were invited to the meeting, but did not join it).
- it ***cannot*** be joined by:
  - authorized server users who were not explicitly added to the list of participants after the conference was locked
  - users who were added to the list of invited participants before the conference started, but did not connect before the conference was locked
  - guests (in case of a public conference).

> *i* Each time when a conference ends, its access status is automatically set to the default value **unlocked**.

You can make a conference accessible to new participants in the same section where the conference was locked. Select the option **Unlock conference** in the conference card.

13.12. Ending the conference

If you are the conference moderator, when you leave the conference (by pressing) you will be asked whether you want to leave the conference or end the conference for all participants.



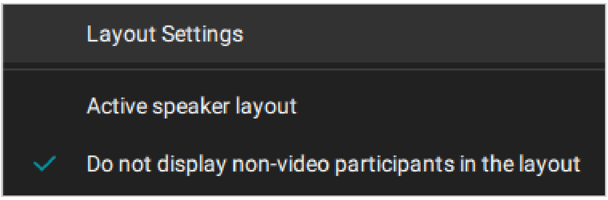
If you choose **Leave** (without ending it for everyone), you can re-join it in the following ways:

- Call its ID or join URL
- If you are the owner, you will only need to create a new conference. The application will automatically redirect you to the conference where you are the owner (if at least one participant still remains in the meeting).

14. Conference layout management

During a conference you can change its layout which is the arrangement of participants' video windows on the screen.

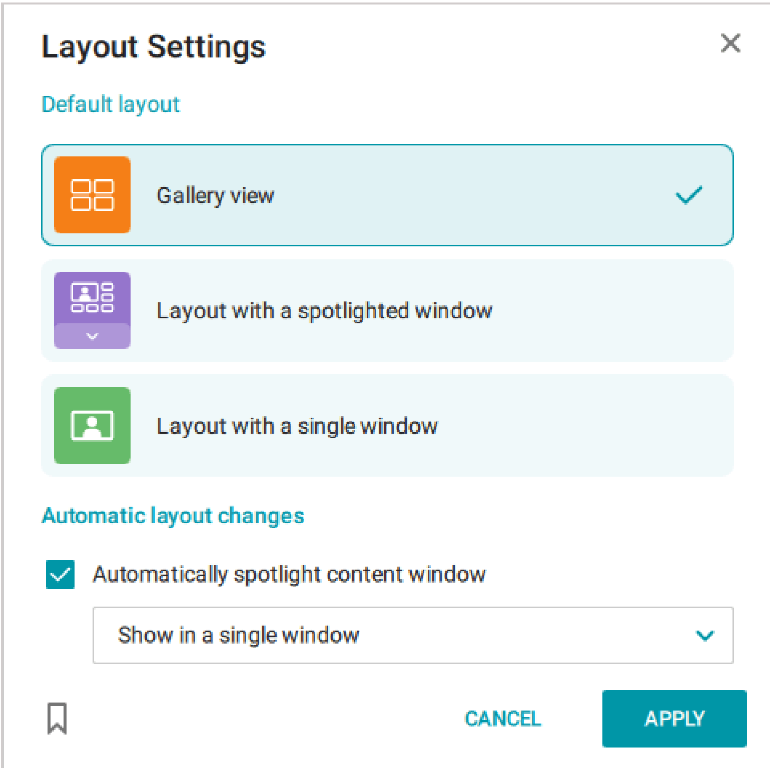
To do it, click the  button in the upper conference control panel.



Here you can:

1. Go to the advanced **Layout settings**
2. Check the **Active speaker layout** box, so that the participant, who is currently speaking, is displayed in an enlarged window.
3. Activate the checkbox **Do not display non-video participants in the layout** to hide the participants who are not streaming their video.

When the **Layout settings** button is clicked, the following menu will open:

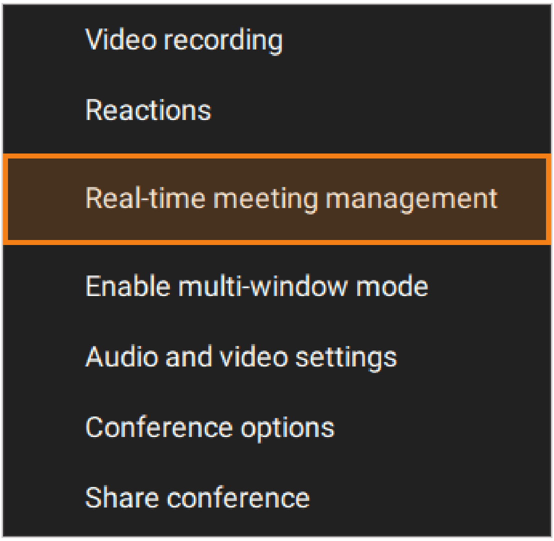


Here you can select one of three video layouts and configure **Automatic layout changes**, specifically you can choose how the content window will behave when it is automatically enlarged. The following options are possible:

1. Display in a single layout window with other participants being hidden
2. Move to a separate application window
3. Display in an enlarged layout window.

14.1. Changing video layout for other meeting participants

If you are the conference moderator, go to **Real-time meeting management** by clicking on the button in the conference controls.

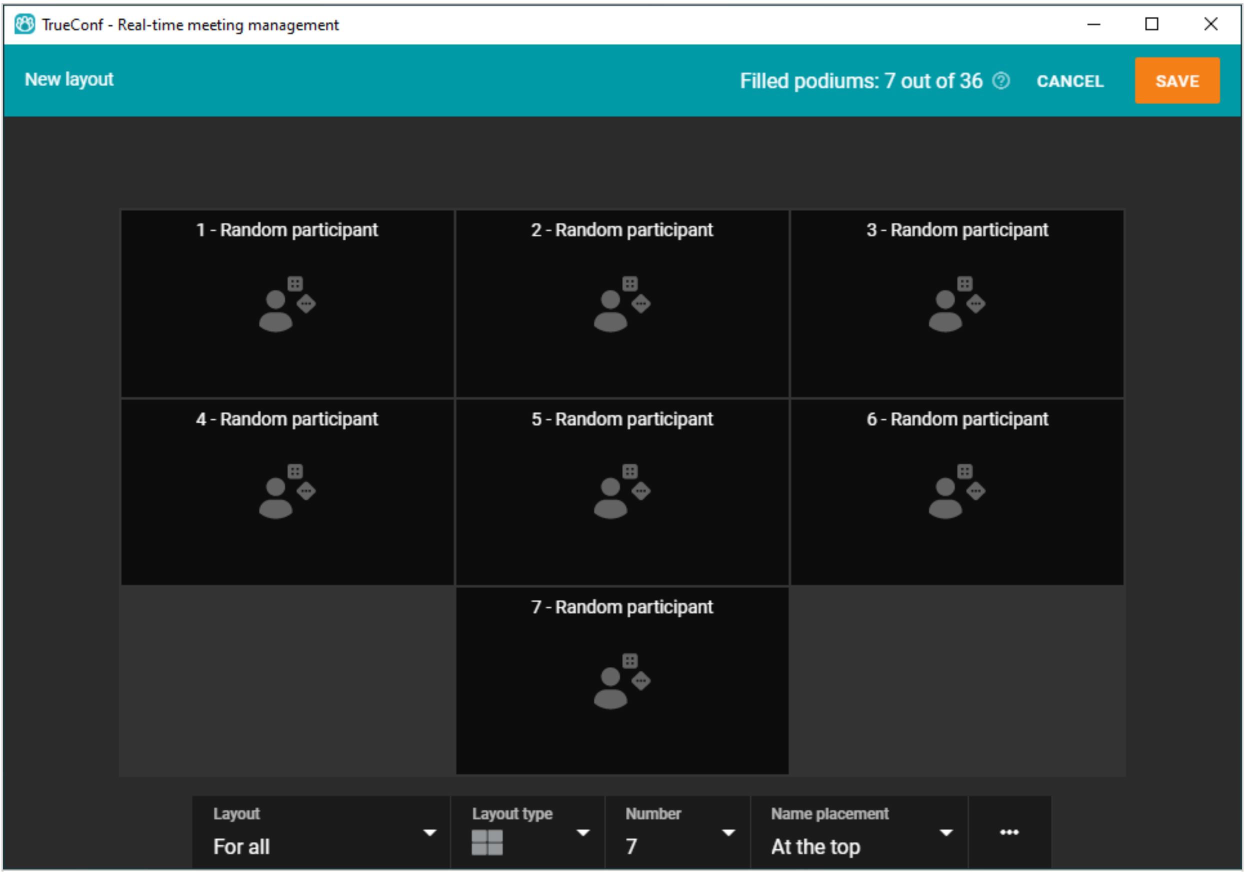


The real-time meeting management window will open. At first, you will be asked to select the users for whom you want to configure the layout:

1. For all. The layout you create will be sent to all users in the conference without exception.
2. For SIP/H.323 devices and WebRTC. If this option is selected, the layout will be sent exclusively to selected types of devices, which can be useful, for example, when streaming a conference to an external audience.
3. Individual video layout. You select an individual conference participant for whom you create the layout.

> In this window, you can also view detailed information about a conference. Click the button in the upper panel next to the conference name and select the **Conference details** option.

Regardless of the option you choose, the window with video layout settings will open.



Here you will see:

- The **Layout** option — here you can add another layout so that it is possible to send different video layouts simultaneously to several individual users or types of devices. For example, you can create two layouts — one for a single user and another for all others.
- The **Layout type** — here you can select the logic by which windows will be placed in the layout. If you hover the mouse over each layout type button, its description will be displayed.
- The **Number** option allows you to choose how many windows will be in your video layout.
- The **Name placement** option determines if a conference participant's name will be displayed and, if so, where it will be positioned (above or below the user's window).
- The **Additional** ··· button opens a set of additional options: **Enable users to change the video layout**, **Auto-fill the video layout**, **Clear the video layout** and **Delete the video layout**.
- User windows — by clicking on each of these windows, you can choose its type: fixed participant (reserved for a certain user), randomly-selected participant, active speaker, reserved for shared content, automatic rotation (alternation) of participants at a certain frequency.

If you are not currently participating in an active conference, the link to real-time meeting manager may still be available in the application scheduler (or in the personal area). However, the following requirements have to be met:

- You are the operator added to the list of invited conference participants.
- You are the conference owner.

14.1.1. Adjusting your video layout of the ongoing meeting

You can always adjust your view of the current meeting.

> * If you change your video layout during the meeting, the view of other participants (both native and browser-based) will not change.

To change the order of video windows:

1. Press and hold the left mouse button on the pane you would like to relocate.
2. Drag the selected pane to another place on the screen.
3. Release the mouse button to switch the participants' panes.

To select a priority window, which will be displayed as the largest in the layout:

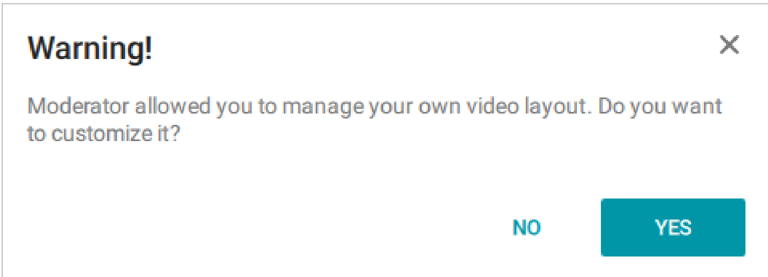
1. Double-click the left mouse button on the image you want to move to the center of the layout and make it large. You can also click on the button that will appear when you hover over the corresponding video window.
2. Other windows will be displayed as thumbnails. Double-click again on the larger window to return the video layout to its original position.

> * It is equally easy to select a window that needs to be spotlighted (enlarged). Double-click on any small window and it will be automatically spotlighted. It is also possible to drag-and-drop video windows when one of the video windows is spotlighted.

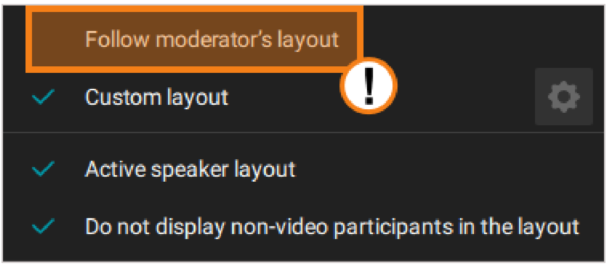
14.1.2. Can meeting participants decline the locked video layout?

Yes, if the meeting owner selects **Enable users to change layout** in the real-time meeting manager.

In this case, conference participants will receive a notification about the new layout created by the moderator and accept or decline this layout:



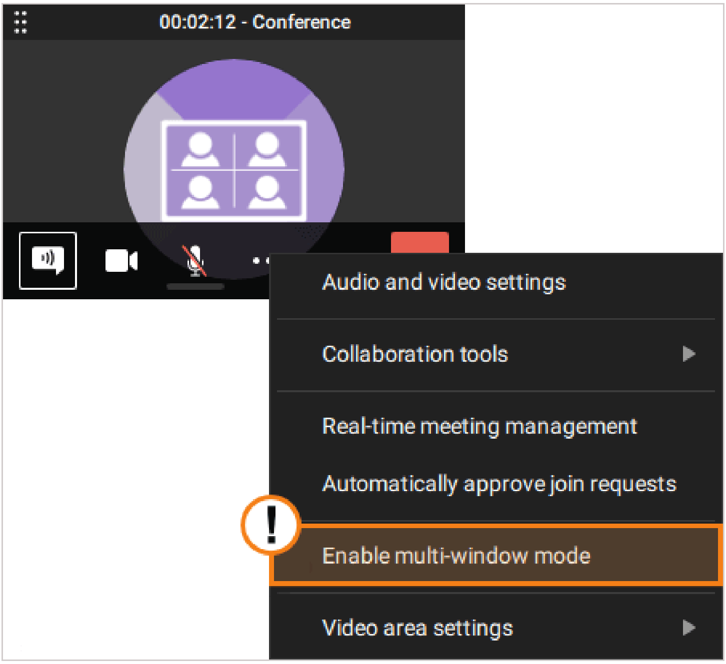
Even if the video layout from the moderator was declined, a user will still be able to enable it. The corresponding button will be available in the **Layout settings** section of the conference control panel.



14.2. Multi-window mode

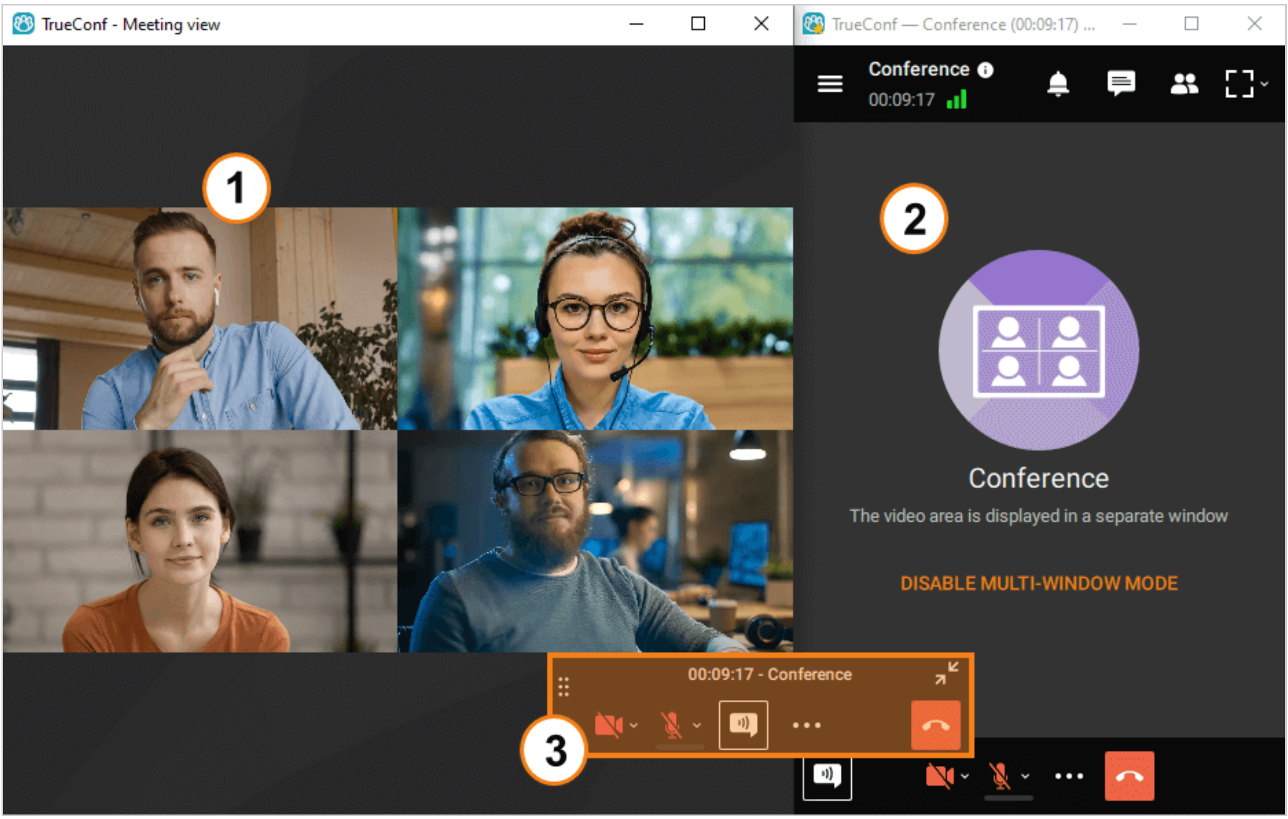
During a conference, you can enable the multi-window mode. It will be useful if you work with multiple monitors: you manage your conference in the main window, while the video area switches to an additional window. There are two options to enable the multi-window mode:

1. Open conference controls, click on the button and select **Enable multi-window mode**.
2. The method described above can also be used to enable multi-window mode in the conference widget.



Once the above steps are complete, the application will split into several windows:

1. Video layout window
2. Main application window
3. Conference control widget.

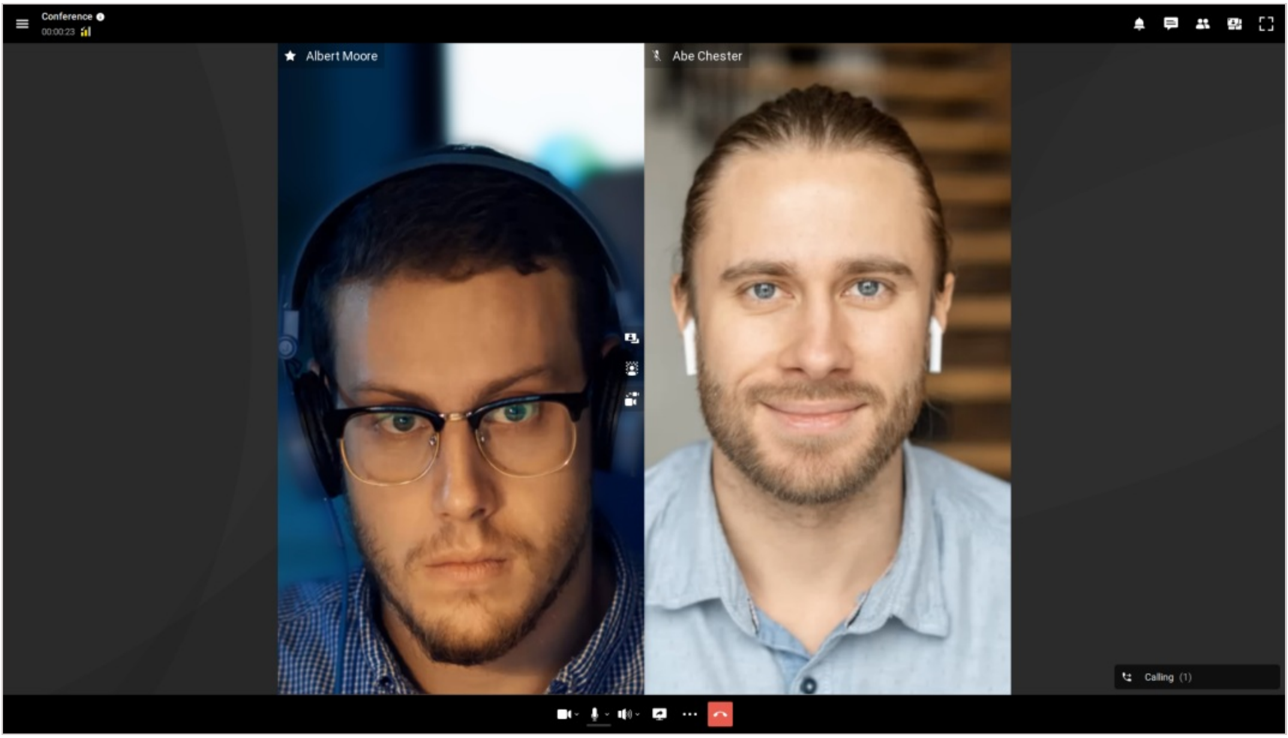


You can disable multi-window mode by clicking **Enable multi-window mode** in the main application window (item **2** in the picture above).

14.3. Vertical orientation of windows in video layouts

Vertical orientation of participants' windows is supported for point-to-point calls and conferences with layouts that include windows of equal size and an enlarged window.

If windows in the conference layout are of the same size, and more than 50 percent of users are streaming video from a camera with a vertical orientation, this orientation will be applied to all windows (including those ones with a horizontal orientation).



15. Role-based conferences

In smart meeting mode, the algorithm of selecting participants, who will be given the podium, takes into account the type of connection: browsers (via WebRTC), SIP/H.323/RTSP devices or TrueConf client applications. This factor determines the priority level of each participant. The type of connection will also lead to some differences in the work of smart meeting mode.

Smart meeting mode is fully supported in the following versions of TrueConf client applications: for desktops (Windows, macOS, Linux) 8.2.1+, for iOS/iPadOS 3.3.0+, for Android/Android TV 2.1+.

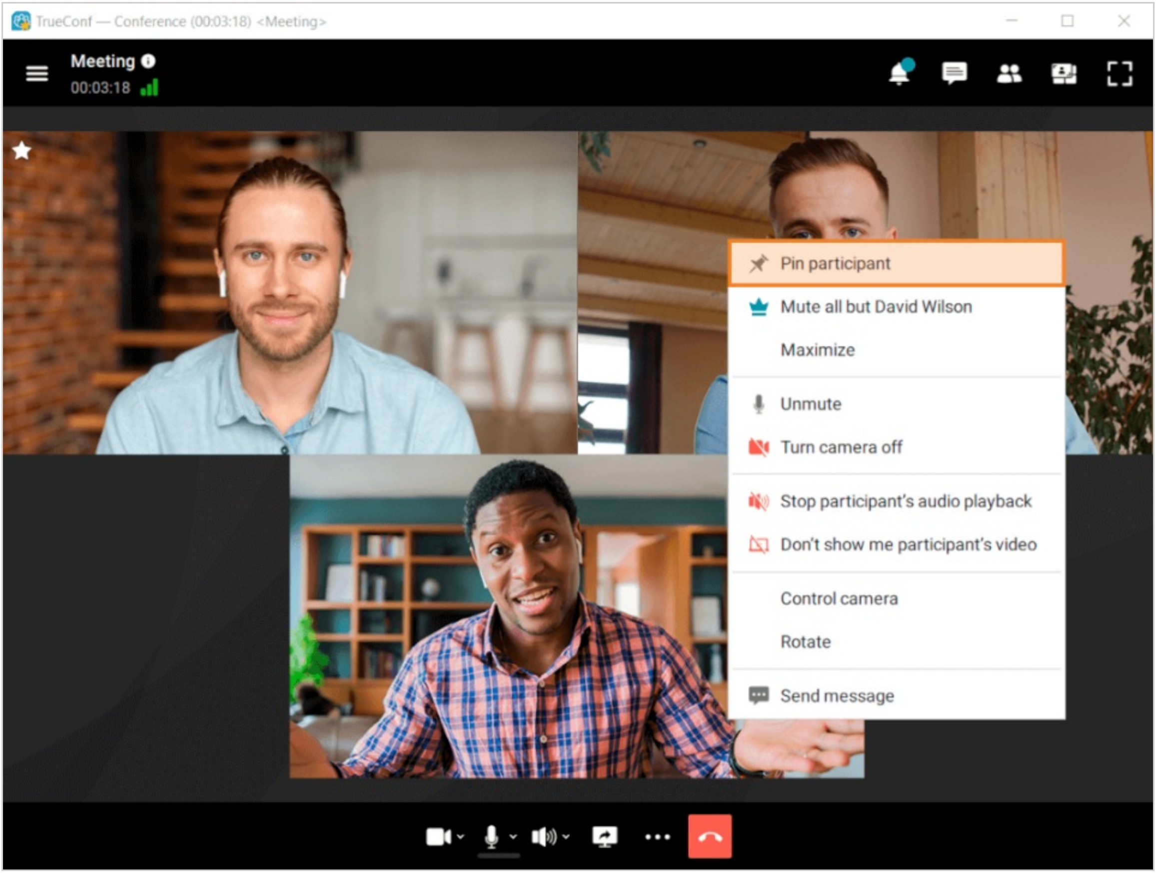
15.1. How smart meeting works when the app is connected to the server 5.4+

In a smart meeting, all podiums (windows of speakers in the video layout) are automatically set to the **Active speaker** type. This window will display the participant who is speaking or sharing content. If several participants speak simultaneously, priority is given to the one who speaks louder.

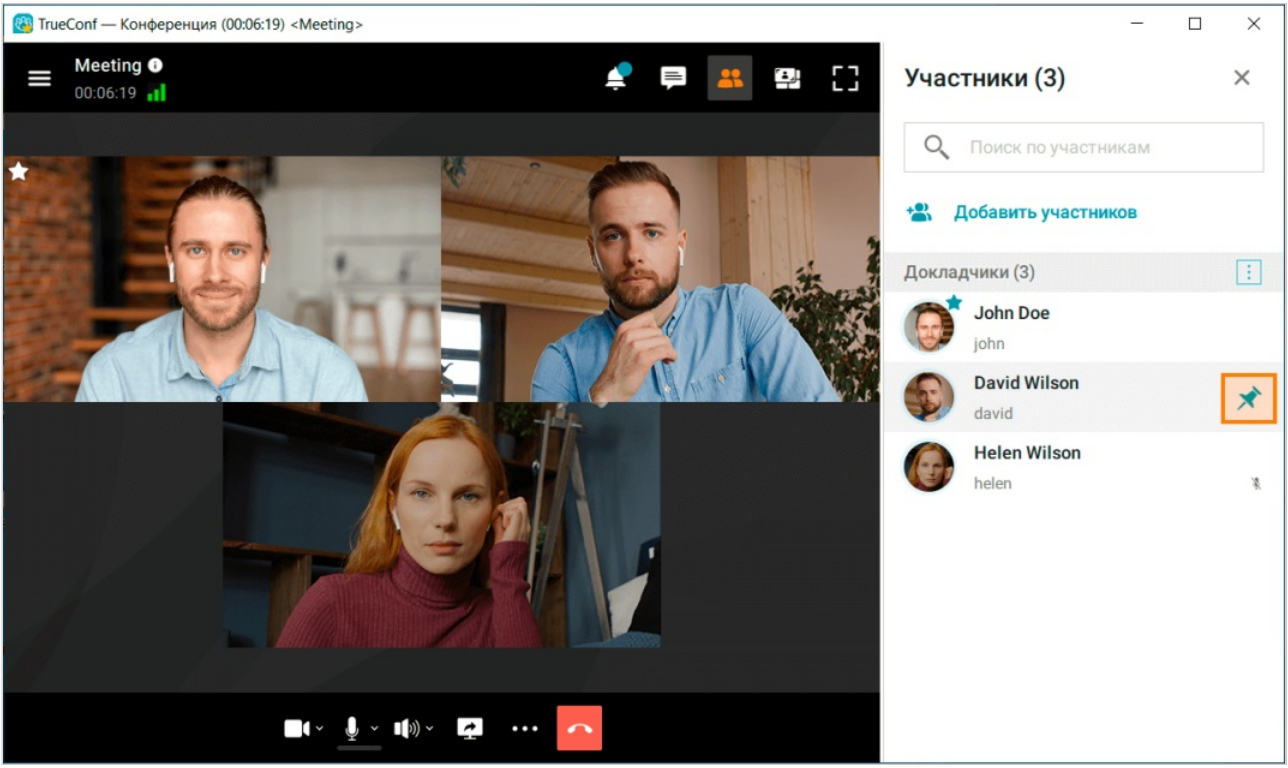
In smart meeting mode, there can be at least 4 spots for speakers on the podium.

When manually configuring video layouts, you will be able to choose different types for video windows, but at least 2 windows must be of the **Active speaker** type.

The number of vacant spots on the podium is limited and can be set when the conference is created. The moderator can pin any participant on the podium to make sure that this user is not replaced even when he/she is silent. To do it, right-click on this participant's video window. Select **Pin participant** in the context menu.



It is also possible to click on the  button displayed when hovering the mouse over a presenter in the list of conference participants. Similarly, you can unpin a participant with the  button or via the context menu.



> *i* When a participant is pinned, he/she is automatically given the podium. This user's microphone will not be automatically unmuted.

Pinned participants cannot fill the entire podium; this restriction is supposed to make sure that speakers can be automatically rotated. The maximum number of pinned participants depends on the number of spots on the podium and can be determined in this way:

`number of spots on the podium - 3`

> *i* When a smart meeting is created, the **Mute participants on entry** box is checked by default. It is done to make sure that a participant cannot take the podium by accident until he/she intentionally unmutes the microphone. This setting does not mute microphones on the side of SIP/H.323 endpoints.

15.1.1. SIP/H.323 endpoints and RTSP devices

The participants, who join a smart meeting from SIP/H.323 endpoints, and RTSP connections (for example, IP cameras) take the podium when they start speaking or if they are pinned in the layout just as client applications. If an endpoint with a muted microphone starts sharing content in the secondary stream, it will also be added to the layout.

15.1.2. Browsers (via WebRTC)

The participants who join a smart meeting from a browser (via WebRTC) take the podium when they start speaking or when they are pinned in the layout by the moderator. Such participants can become presenters even with a muted microphone when they start content sharing.

15.1.3. Client applications that do not support smart meeting mode

If a participant joins a smart meeting from an app that does not support this mode (check the list of supported applications), this meeting will work as a regular moderated role-based conference for this user. So, to take the podium, this participant will need to click the **Take podium** button, and the moderator will see the corresponding request. After taking the podium, such a participant will automatically be pinned in the layout. Besides, the moderator can pin this user to the podium by clicking the button which will give the presenter status to the participant. Such a presenter can leave the podium by clicking the **Leave podium** button, or if the moderator unpins him/her with the button.

15.2. How smart meeting works when the app is connected to server 5.3 or older

15.2.1. When joining the conference from applications that support smart meeting mode

The general rules are the same as in the case when the app is connected to TrueConf Server 5.4+, but all video windows will be slots for active speakers. There are some other differences described below.

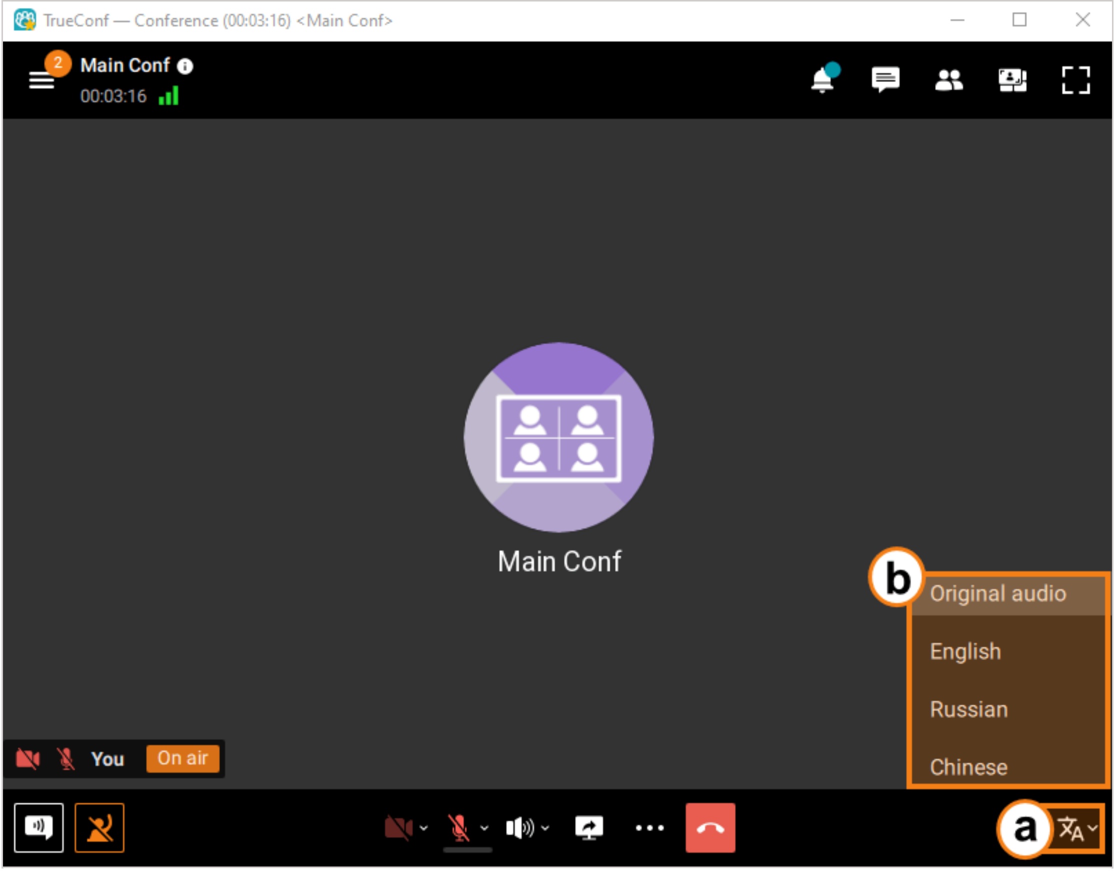
All video windows (slots) are of the "active speaker" type. A user will take the podium automatically, according to a specific algorithm: the person who is speaking or sharing content (even without voice activity) is displayed in the layout instead of another participant who is no longer talking. The first person to be replaced in the video layout is the user who has been silent longer than others or started sharing content earlier (if his/her microphone is muted).

15.2.2. Client applications that do not support smart meeting mode

If a participant joins a smart meeting from the application that does not support this mode (check the list of supported applications), this meeting will work as a moderated role-based conference for this user. The same rules discussed above for TrueConf Server 5.4+ will apply.

15.3. Simultaneous interpretation

During a moderated role-based conference with simultaneous interpretation, you will also be able to select a language audio track. To do it, click the language selection button (**a**), and then select the required track from the context menu (**b**).



15.4. Features in a moderated role-based conference

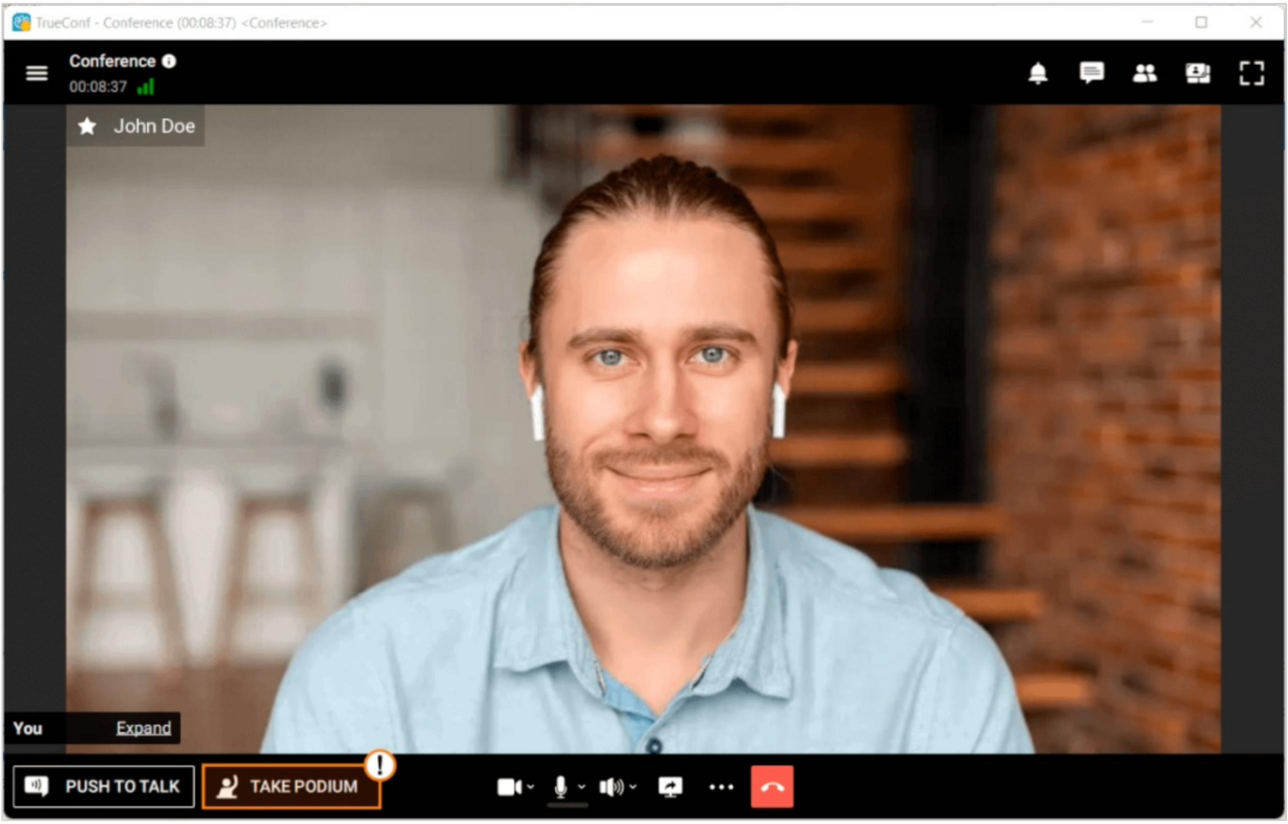
15.4.1. How to make an audio remark

During a moderated role-based conference, you can make a brief audio remark without requesting a special permission. To do it, click and hold the **Push to talk** button on the conference control panel and speak while the button is held (you can also use the hotkeys **CTRL + T** or **Space**). When a click in the GUI is made or after a brief one-time press on a keyboard button, your sound will be streamed into the conference for three more seconds (the button will display a countdown). At the same time, if your comment takes more than three seconds, you can hold the keys until you finish your sentence. In case it lasts longer than three seconds, then after you release the button/hotkey, your comment will end without any additional countdown.

When making an audio remark, the user will not transmit the video stream.

15.4.2. Taking and leaving the podium

In the conference control panel you can see the **Take podium** button. Click it (or use the keyboard shortcut **Ctrl + U**) to send the moderator a corresponding request. If confirmed, you will take the podium as a speaker. Any conference participant can send podium requests.

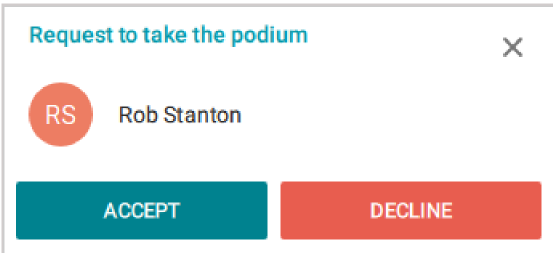


If you no longer need to speak during a meeting, you can click on the **Leave podium** button which is displayed instead of the **Take podium** button.

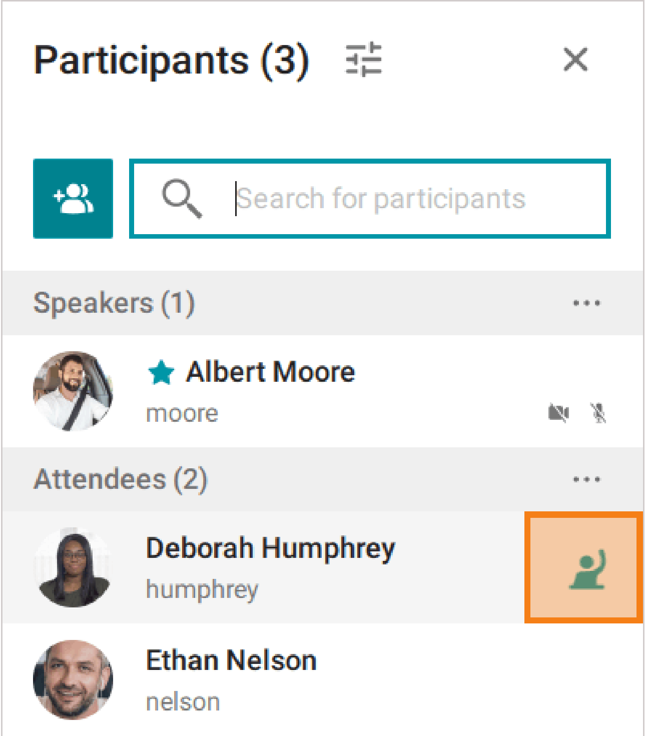
Endpoint users can also send DTMF commands from their device during a conference. **1.** - request to take the podium **2.** - leave the podium.

15.4.3. Permission to take the podium

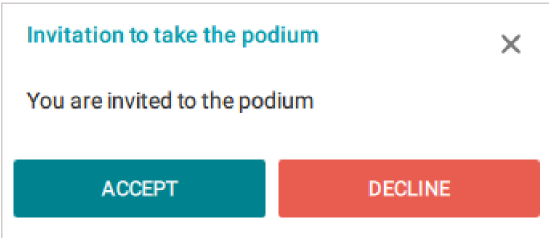
The following notification will be displayed to a conference moderator if one of the attendees requests the podium:



During a moderated role-based conference, the moderator can invite a participant to the podium by selecting the user from the list of participants and clicking on the speaker icon.



The participant will be invited to become a speaker:



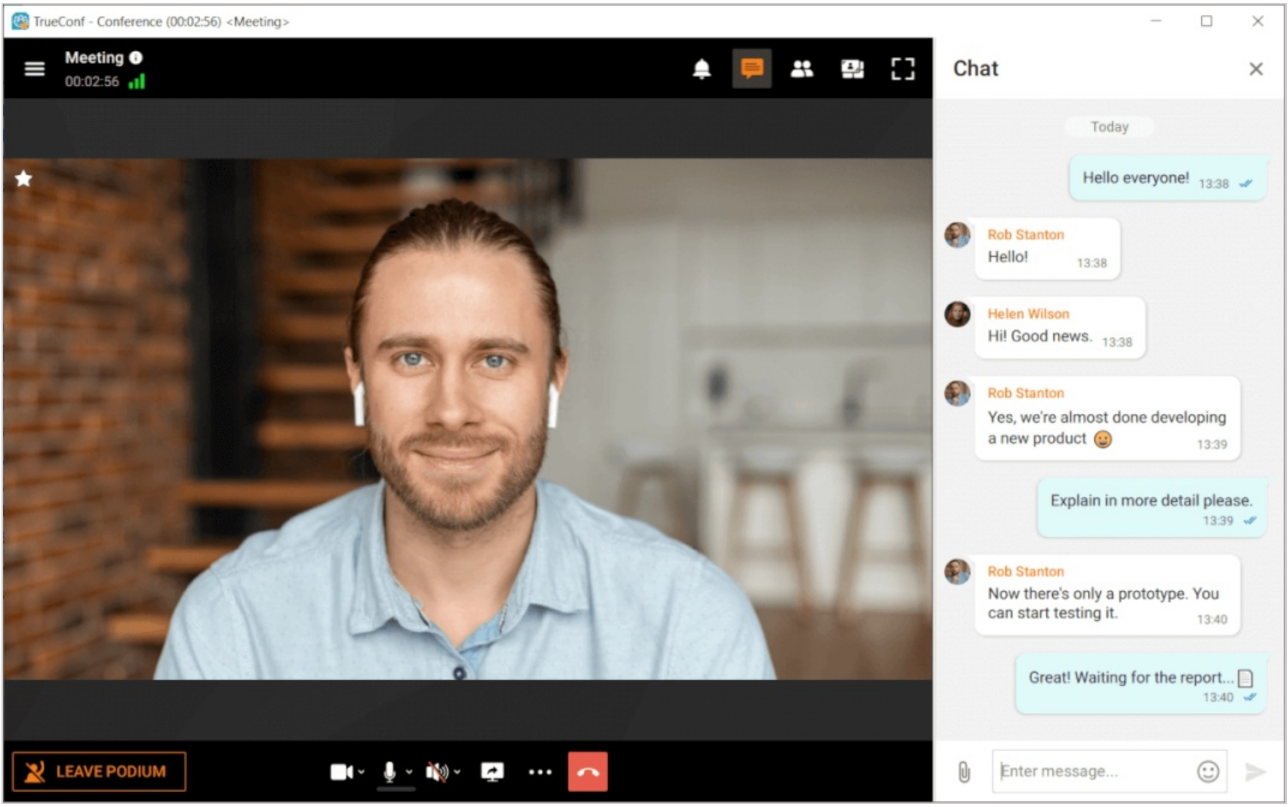
Similarly, you can remove a participant from the podium using the  button. You can also change roles of any participant using the **Invite to Podium** and **Remove from podium** context menu items, which appear by right-clicking on a user in the list of meeting participants.

16. Chat

Instant messaging (or chat) allows users to exchange text messages or files during video calls or group video conferences. You can use chat not only during video calls or conferences, but every time you need to send a message to other users.

> * If you sign in on a different device, your previous chat history won't be available.

> *i* If your TrueConf Server instance is below v. 5.0, chats will not be synchronised across your devices.



With this messaging platform, you can:

- Send text messages
- Edit, forward, and delete text messages

> ! Please note that you can edit only those messages that were sent less than **48 hours** ago.

- [Search for words and phrases] (#search-of-message) within chat messages
- [share files] [#send-files]
- Create a conference

All chat messages can be edited. To do it, right-click on a message and select the **Edit** option. An edited message will be marked as **edited** (the date of editing will also be specified).

If you right-click on a message, the following options will be available:

- Reply
- Edit
- Forward
- Copy
- Delete
- Select messages (e.g., you can select multiple messages and delete, copy or forward them in bulk).

> Multiple messages can be selected in the same way the text is selected. To do it, left-click on a message and drag the mouse up or down.

Click on the button ⋮ in the upper right corner of the application to access additional features:

- View additional information about a user or a group chat
- Check the list of all sent files
- Clear chat history
- Delete a chat (you can also delete it for the other user by marking the corresponding checkbox)
- Block a contact.

> ! Please be careful when clearing chat history or deleting a chat. This action cannot be reversed. Even if you are added to this chat afterwards, you will not be able to view previous messages because all chat history has been removed.

> The same group chat will be used for a virtual room or a recurring conference. It will be synced with the conference.

16.1. Message formatting

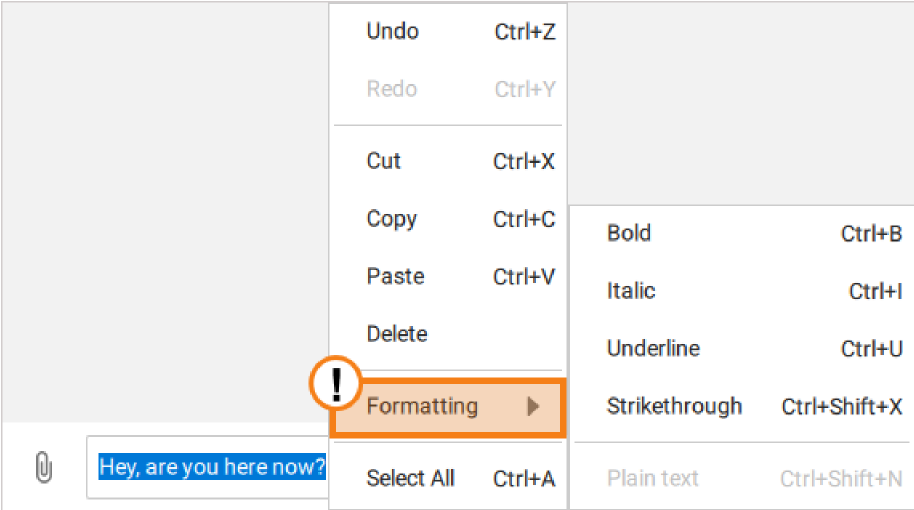
To format a message, right-click on the selected text in the input field and in the **Formatting** option select the correct format: **bold**, *italic*, underline, ~~strike-through~~ or use Markdown. The following special characters are supported:

`**text**` — bold

`__text__` — italic

`~~text~~` — strike-through.

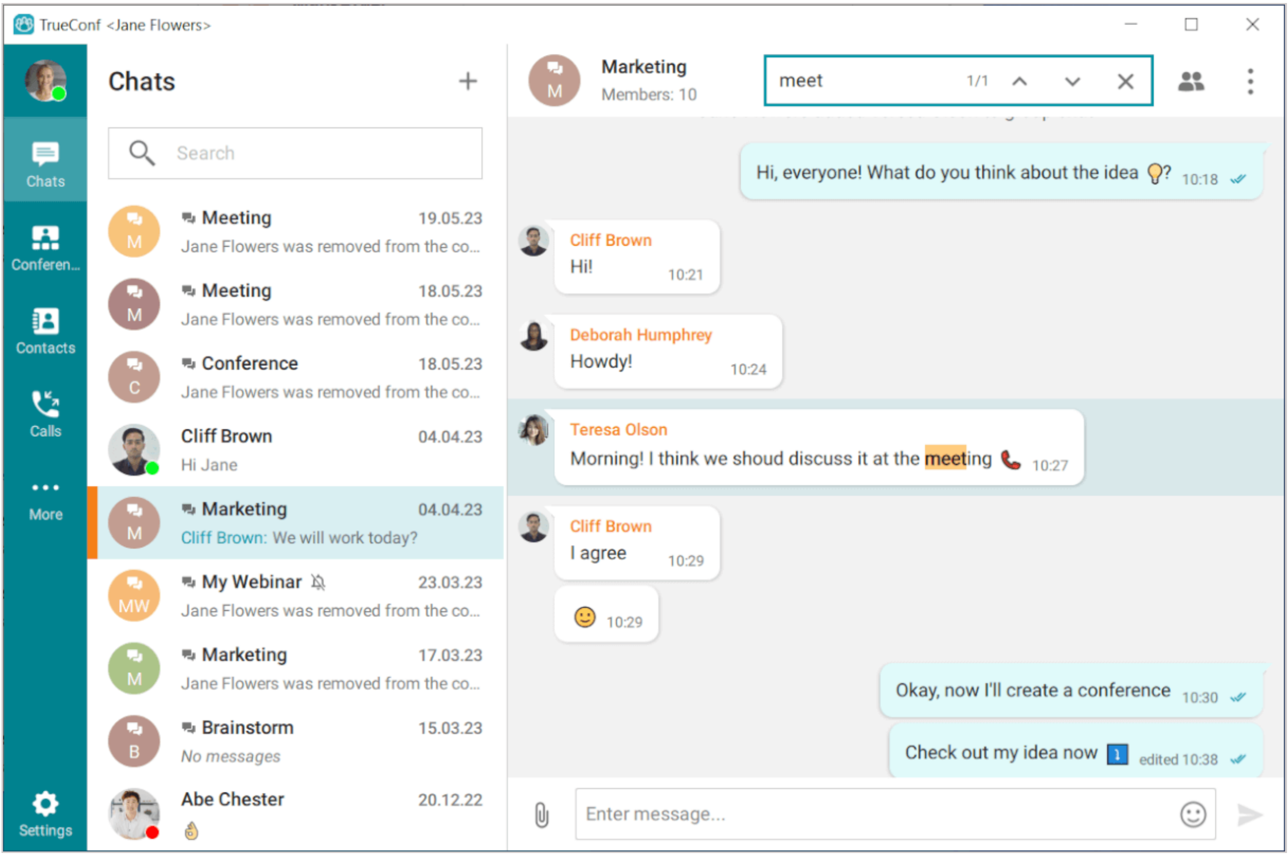
You can also format the selected text via the context menu which can be opened up by **right-clicking** on the chat line:



You can also use hotkeys to quickly format a chat message.

16.2. Searching for messages

To find a chat message click the button which will open an input field. Enter the text in the input field and, as you type, the messages matching your query will be highlighted.



If multiple messages have been found, you can switch between them with these buttons: and .

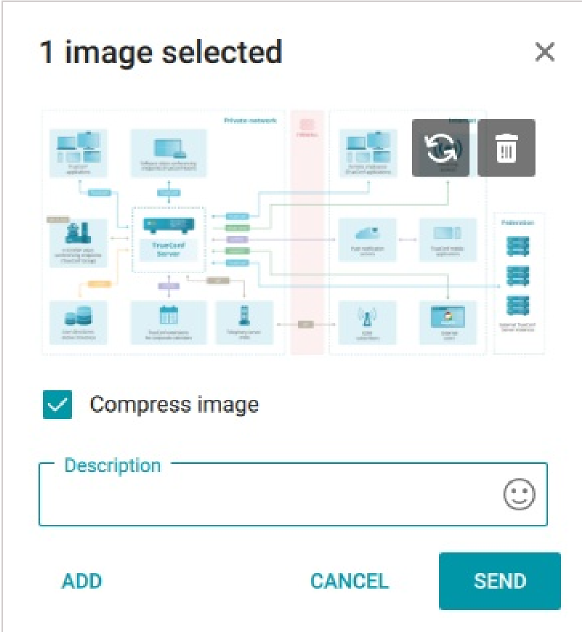
Right next to these buttons, there is a counter indicating the number of messages that match your query.

If you double-click on a chat in the list, it will be scrolled down to the very bottom.

16.3. Sending files to a chat

To send files simply drag and drop them to the chat panel (you can also send a folder with files, including a nested folder). Alternatively, you can click on the paperclip icon on the left side of the input field.

You can select multiple files by pressing CTRL or clicking on the **Add** button in the preview window.



By default any image you send will be compressed. To send the image in the original quality, uncheck the box **Compress image**.

You can also type an additional message in the **Description** field. This message will be sent together with the files.

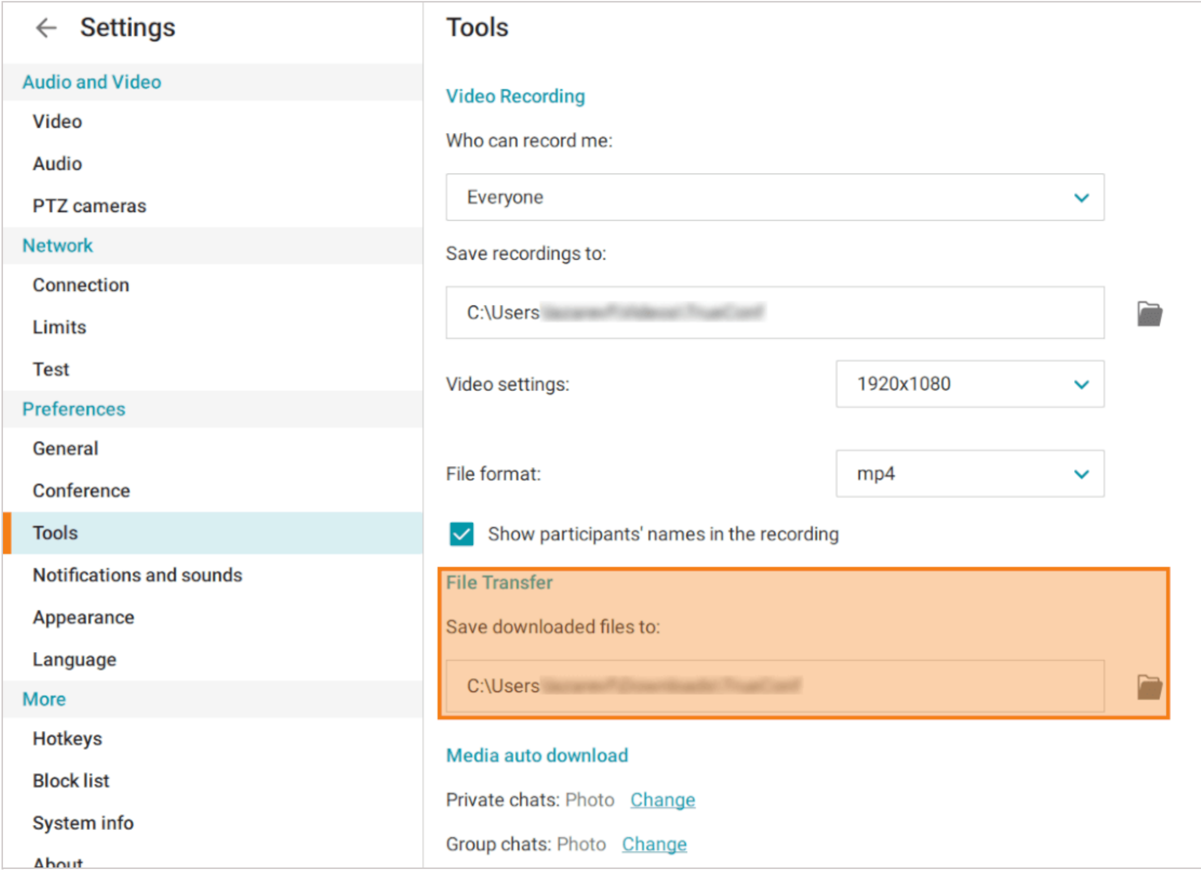
> *i* If users are not currently online, you can send them an offline message, they will get it immediately when they are online.

The default location of downloaded files is:

- `%USERPROFILE%/Downloads` for Windows
- `/home/$USER/Downloads` for Linux
- `~/Downloads/` for macOS

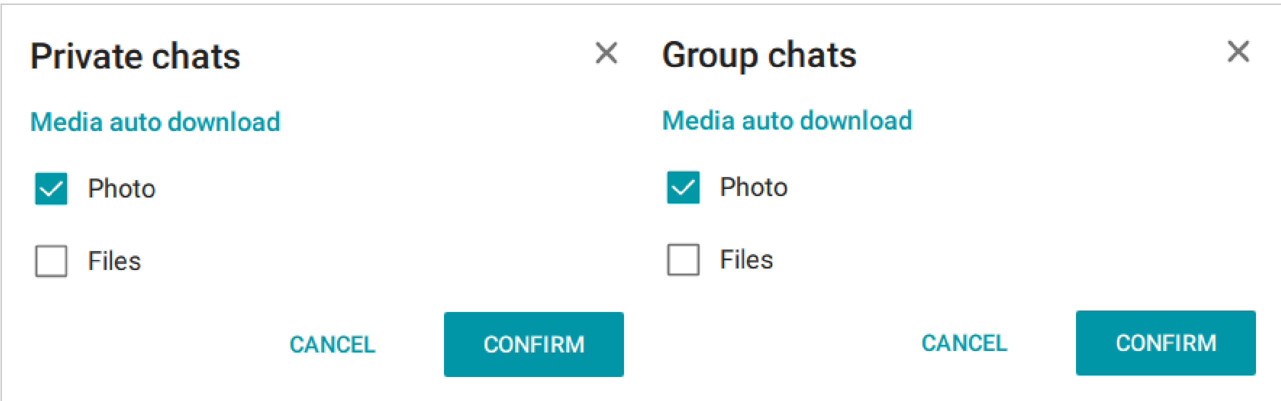
To change the download folder, go to **Settings →Preferences →Tools** menu in the application window. Then click the button in the **File Transfer** section and specify the required folder.

> *i* A subfolder named `TrueConf`, which will store all chat attachments, will be automatically created in the folder selected for downloaded files.



If you want to open the files sent to the chat, click on the ⋮ button and choose **Files**.

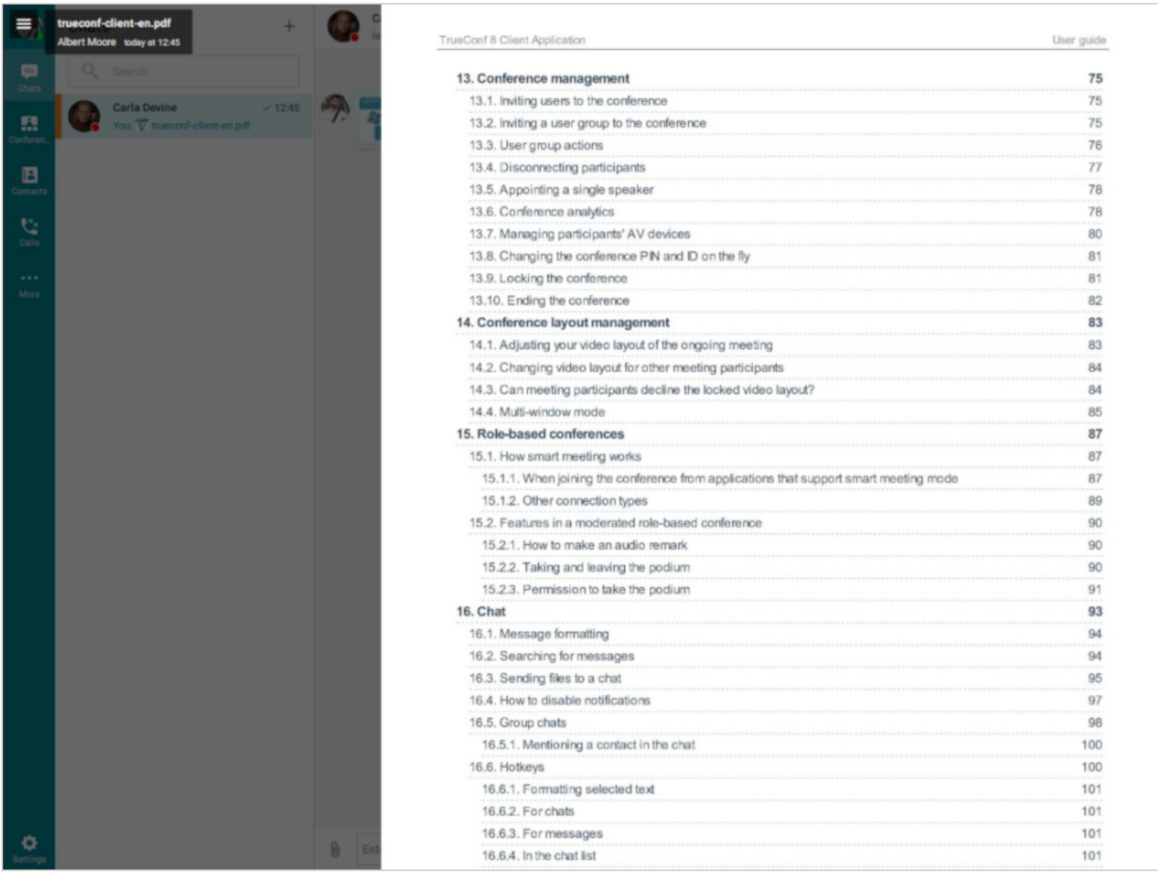
If needed, you can configure automatic downloading of chat files or disable it. To do it, go to the **Tools** section and navigate to the **Media auto download** block. Here, you can configure automatic file downloading for private and group chats; to do it, click the **Change** button and select the necessary options in the context menu.



16.3.1. Working with PDF files

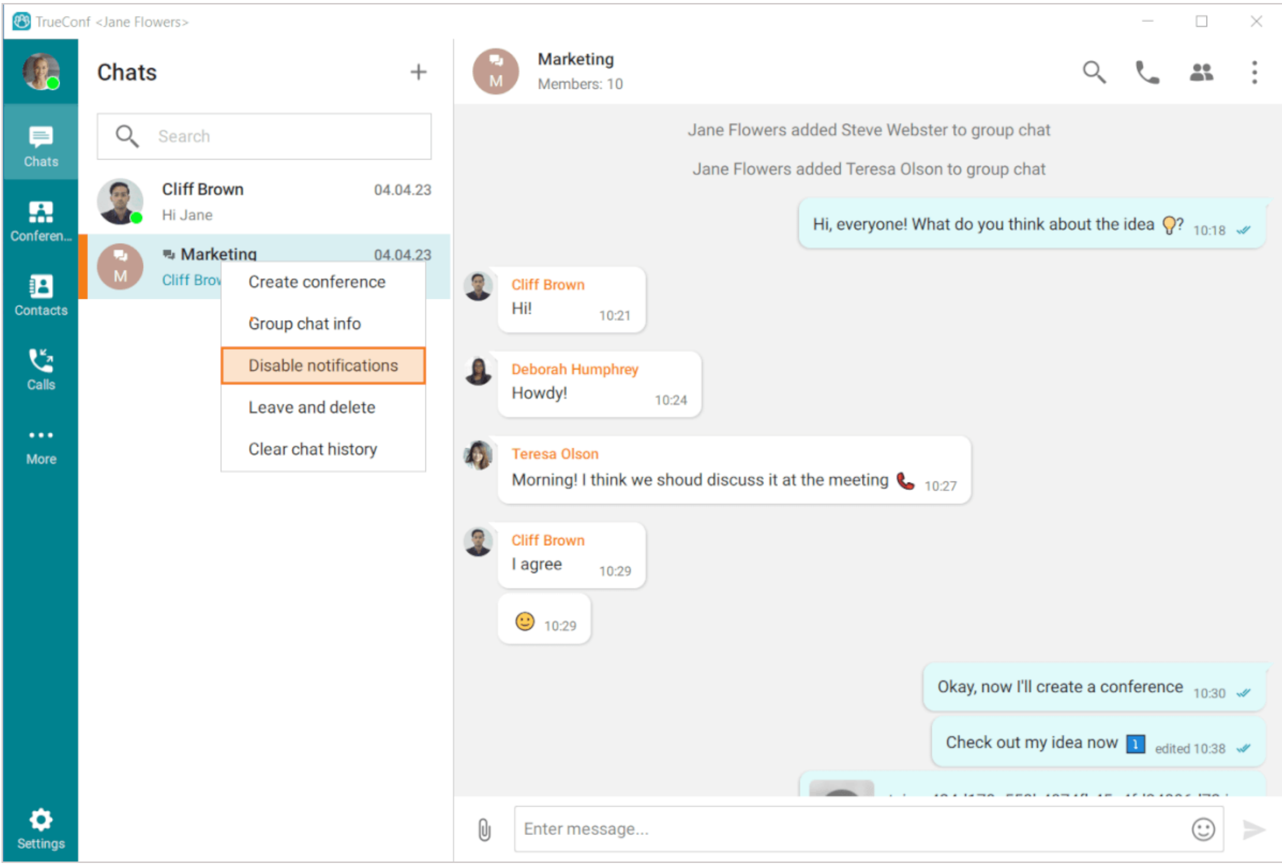
You can use the built-in viewer to open PDF files sent to you; however, to do it, you will need to have the Ghostscript plugin installed on your computer.

To learn more about the configuration of this plugin, check the "Content sharing" section.

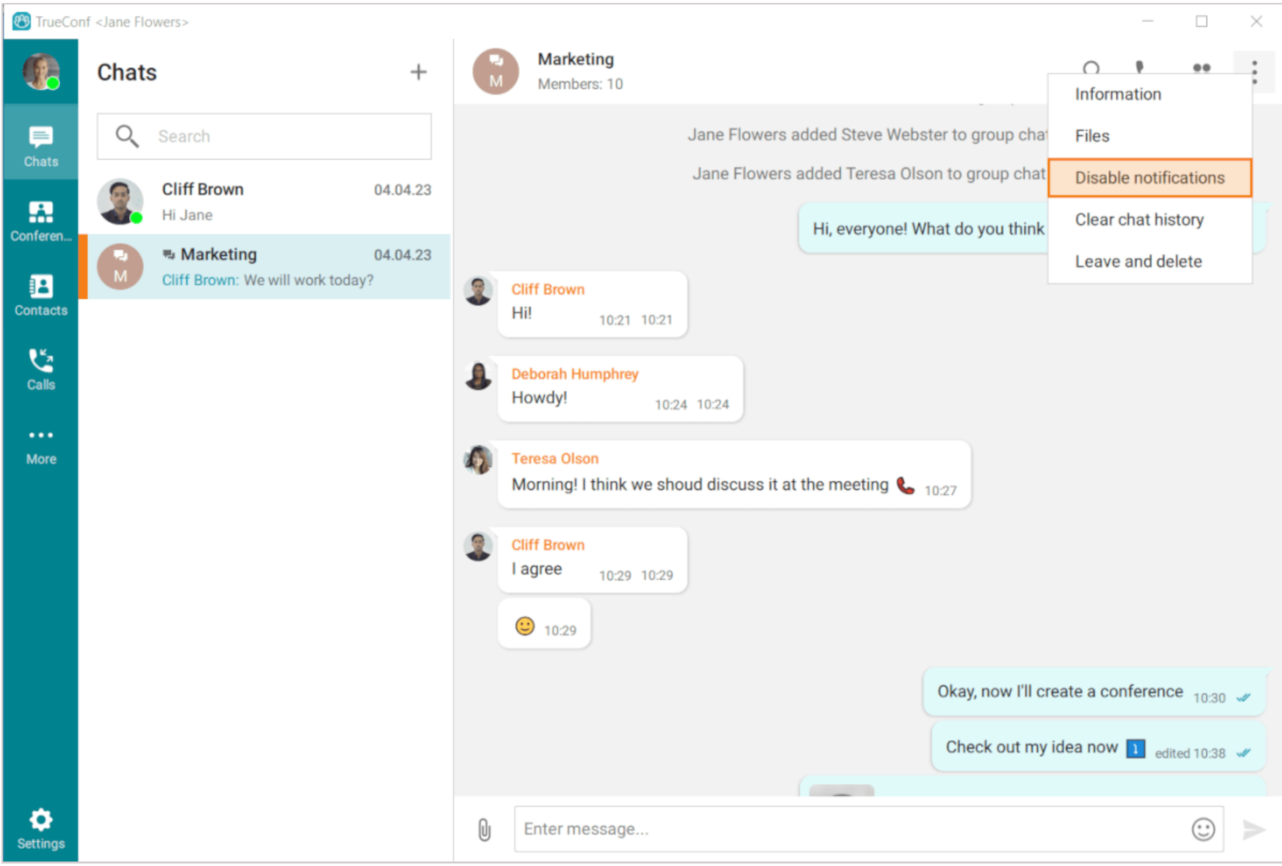


16.4. How to disable notifications

You can disable notifications about chat messages (for both group and private chats). To do it, right-click on a chat and select the **Disable notifications** option in the context menu.



To activate this feature, you can also click on the button ⋮ in the upper right corner of the chat window and select the same option in the menu:



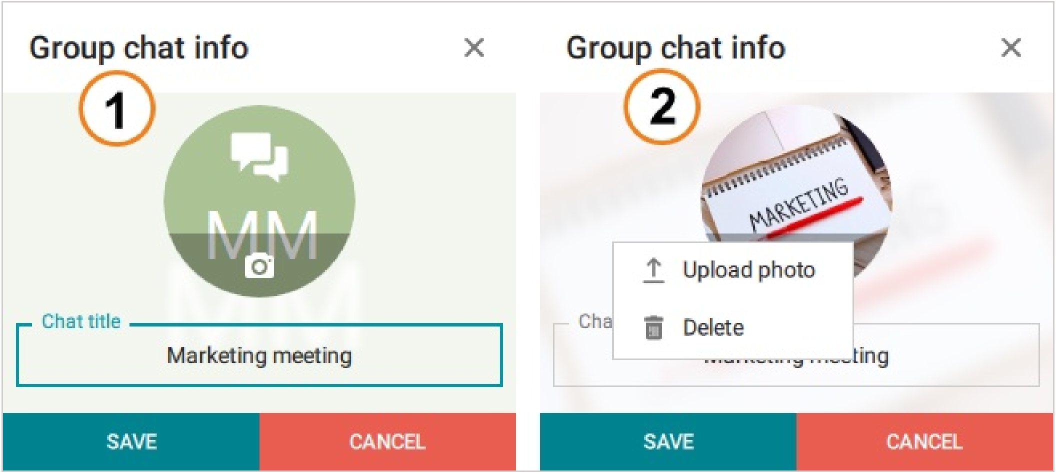
The notifications from the selected chat will no longer be displayed. You can enable these notifications in a similar way.

> *i* This configuration is local which means that it applies only to the selected instance of the application without being bound to the user account. For example, if you disable notifications for a chat in a desktop application, they will still be displayed in a mobile application or in a desktop app installed on a different computer.

16.5. Group chats

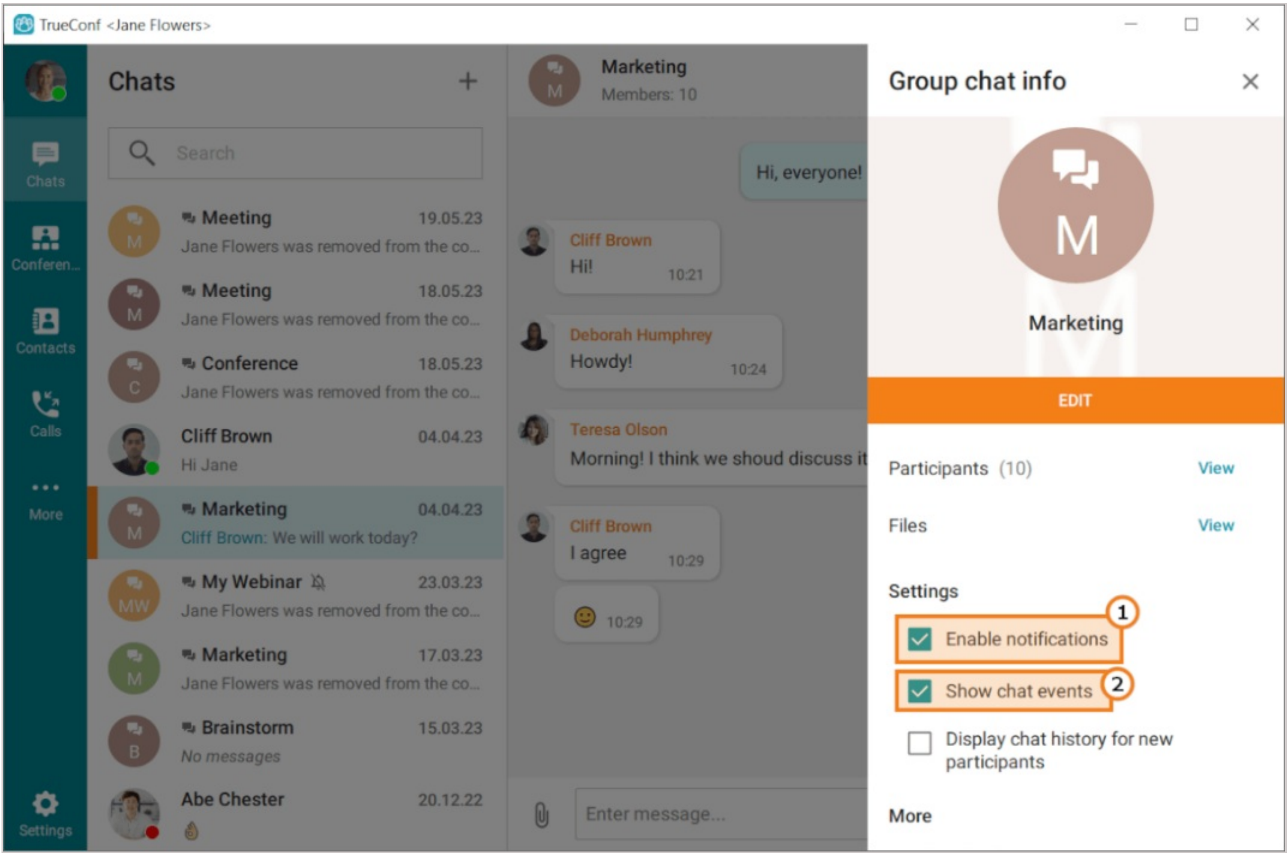
To create a group chat, select the **Chats** option. Then, click on the + button, enter the chat name, and upload the chat avatar (optional). Then click on the **Create** button. In the pop-up window you can select and add participants to the chat from your address book.

The owner of a group chat can change its title (1) and avatar (2). To do it, click the ⋮ button and go to the **Information** section.



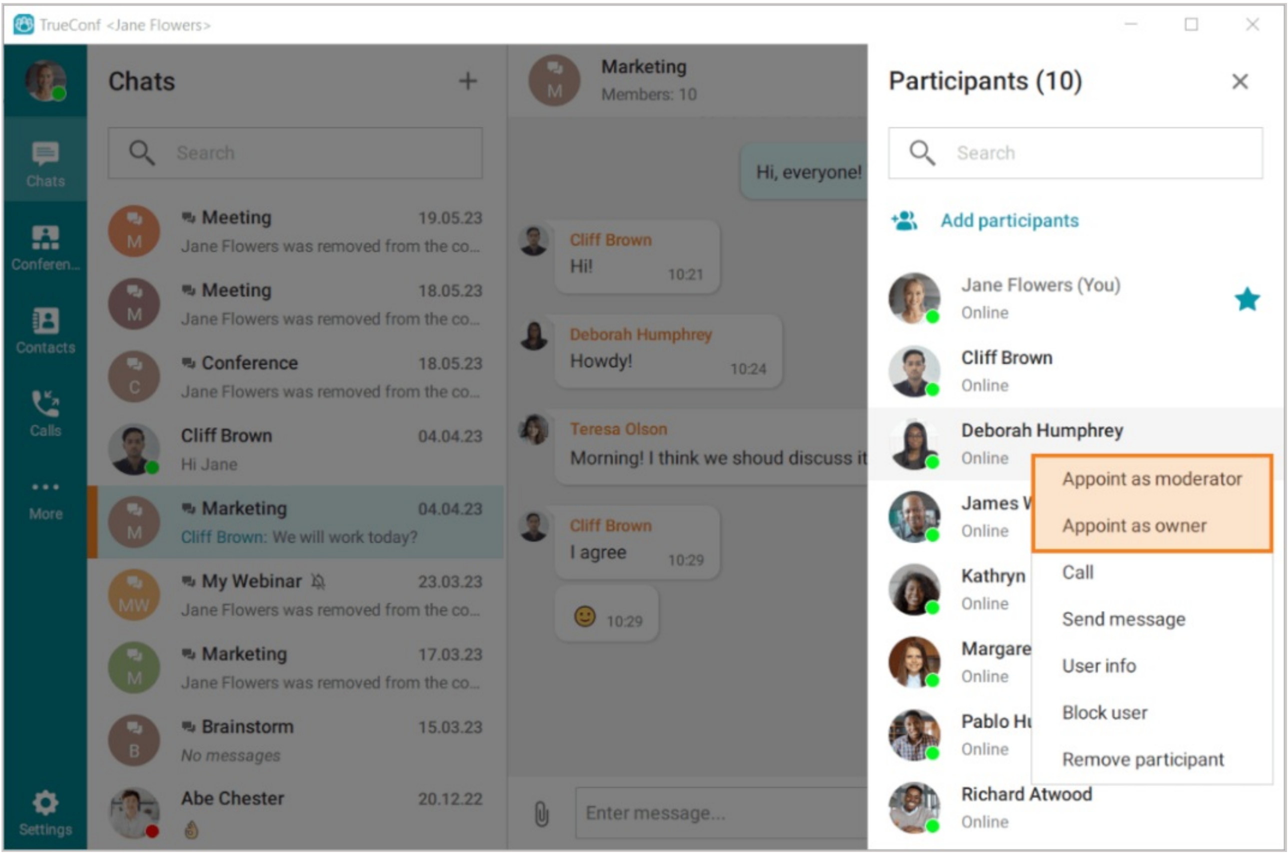
In the **Information** menu, you can configure additional chat settings:

1. Message formatting
2. Visibility of chat history for new participants



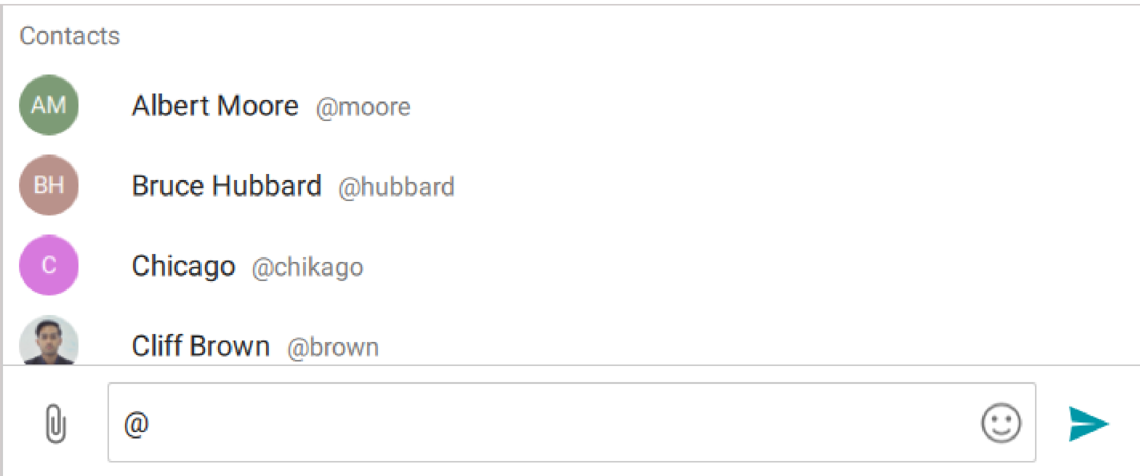
The owner of a group chat can give moderator rights to other chat participants; it is also possible to fully transfer chat ownership. To do it, click on the button and right-click on the selected participant. Choose **Appoint as moderator** or **Appoint as owner**. The moderator can add or delete participants, appoint new moderators, delete messages, change the chat name and select a new chat avatar. The chat owner will be marked with this icon . The moderators (if there are any) will be marked with .

> *i* Only the owner can delete a group chat for all its participants.



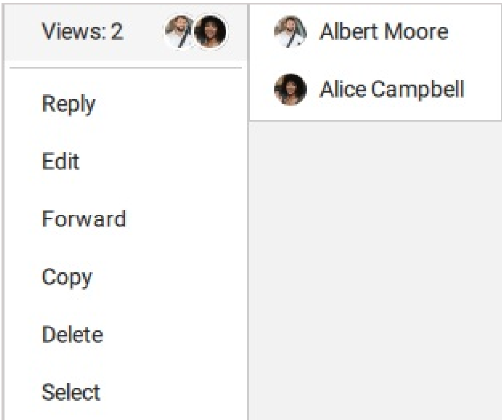
16.5.1. Mentioning a contact in the chat

You can mention a user in a message by specifying their TrueConf ID prefixed with the `@` character. As a result, the user's name, which links to their profile, will be displayed in the message.



16.5.2. List of users who have read the message

The sender of messages in a group chat can see the names of the participants who have already read each message at any given time.



This feature has a number of specific restrictions:

1. It is applicable for chats with up to 20 participants.
2. A message cannot be older than 7 days.

16.6. Hotkeys

> *i* These hotkeys are available only in the **Chats** window. To view other hotkeys, please check the settings.

Up and down arrows will later be referred to as `↓` and `↑`.

If you are using macOS, press `⌘ (Command)` instead of `Ctrl`.

16.6.1. Formatting selected text

- `Ctrl + B` — bold
- `Ctrl + I` — italic
- `Ctrl + U` — underline
- `Ctrl + Shift + X` — strike-through
- `Ctrl + Shift + N` — clear formatting

16.6.2. For chats

- `Alt + ↓`, `Ctrl + Tab`, `Ctrl + PageDown` — switch to the previous chat
- `Alt + ↑`, `Ctrl + Shift + Tab`, `Ctrl + PageUp` — switch to the next chat
- `Esc` — leave the chat or undo the current action.

16.6.3. For messages

- `Ctrl + ↑` and `Ctrl + ↓` — select a message for a quick reply
- `Ctrl + ↓` — cancel the reply
- `↑` — edit the last message
- `Del` — delete selected messages.

16.6.4. In the chat list

These hotkeys work only if no chats are opened.

- `↑` and `↓` — navigation
- `Enter` — open the selected chat.

17. Conference recordings

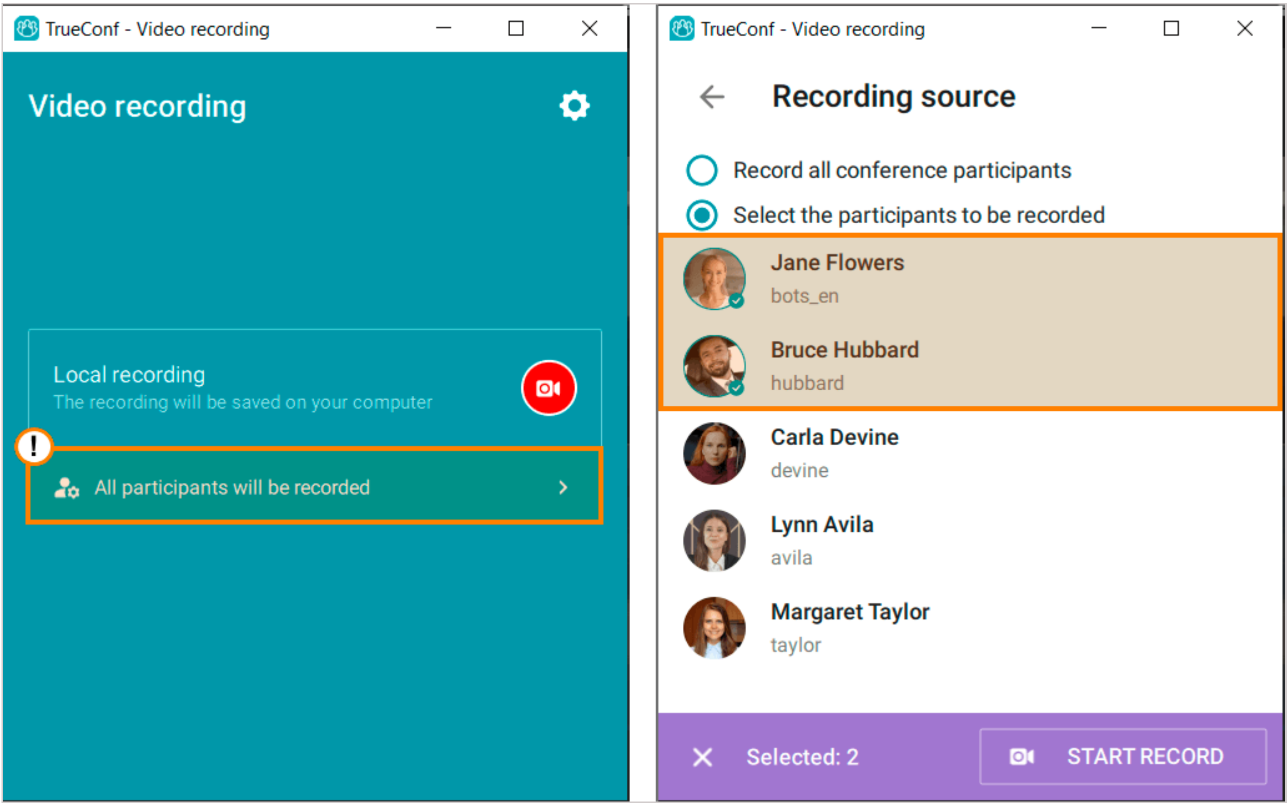
17.1. How to save recordings on the server

If you are the conference owner, you can control various parameters for saving the video recording on your TrueConf Server. To do it, go to the real-time meeting management section, and click on the button in the upper right corner of the pop-up window. Next, select the option **Recording**. This meeting will be recorded either with the **For all** layout (it has been previously configured) or with the default layout generated automatically depending on the selected conference mode. To get the recording of a conference created ad hoc, you need to contact the administrator of the video conferencing server where this meeting was hosted.

A conference can be recorded locally by any of its participants as it is shown below. Such a recording will include only the windows of the participants who gave permission for recording.

17.2. How to record a video conference locally

During a call or conference, click on the button and choose **Video recording**. In the pop-up window, click button to select the recording source, specify the conference participants you want to record (all, only yourself or someone else) and click .



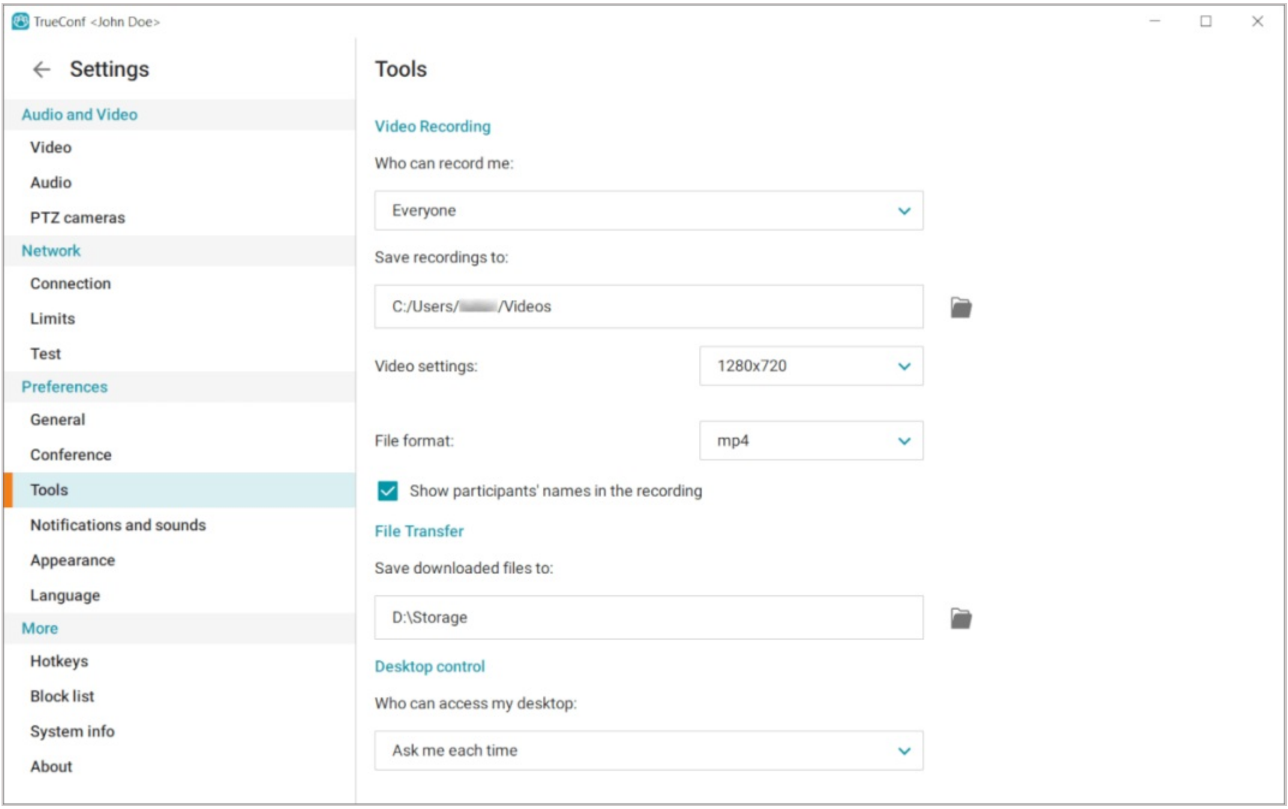
Each conference participant, who is being recorded, will see the icon in the upper left corner of his/her video window.

The participant, who is recording the meeting, will see the button in the conference control panel. When clicked, this button opens the window where one can control recording.

If content or slideshow is shared in a separate window, it will also be recorded.

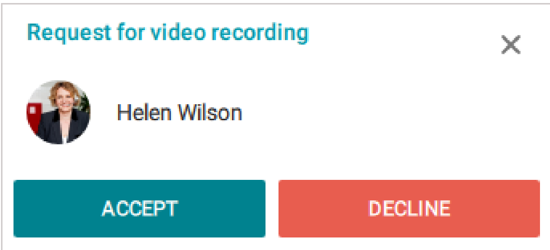
17.3. How to configure permissions for conference recording

Each participant can configure permissions for conference recording individually (to do it, proceed to **Settings →Preferences →Tools →Video Recording**, **Who can record me** field in your client application).



Possible settings options:

- **Nobody**. Your video window cannot be recorded.
- **Ask me each time**. Before recording starts, a conference participant will get the following request:



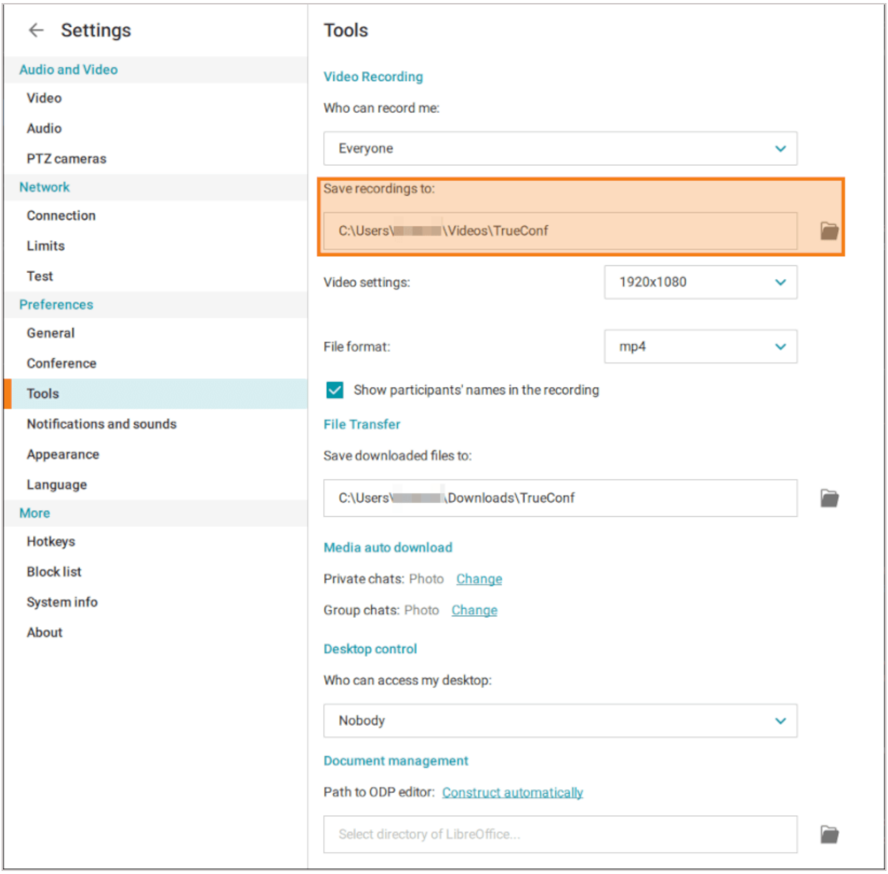
> *i* If granted, the permission cannot be revoked. Recording will stop only when you leave the conference.

- **Users from my Address Book**. Automatic recording of your video window is allowed for your address book contacts, while other users will have to ask for permission.
- **Everyone**. Automatic recording of your video window is allowed for everybody.

17.4. How to find conference recordings

By default, video conference recordings are saved in **.mp4** format to the **Videos** folder on your PC. This folder can be found in your profile folder by following the path given in the **Video Recording** section, **Settings →Preferences →Tools**.

> *i* A subfolder named `TrueConf`, which will store all conference recordings, will be automatically created in the folder selected for saving video recordings.



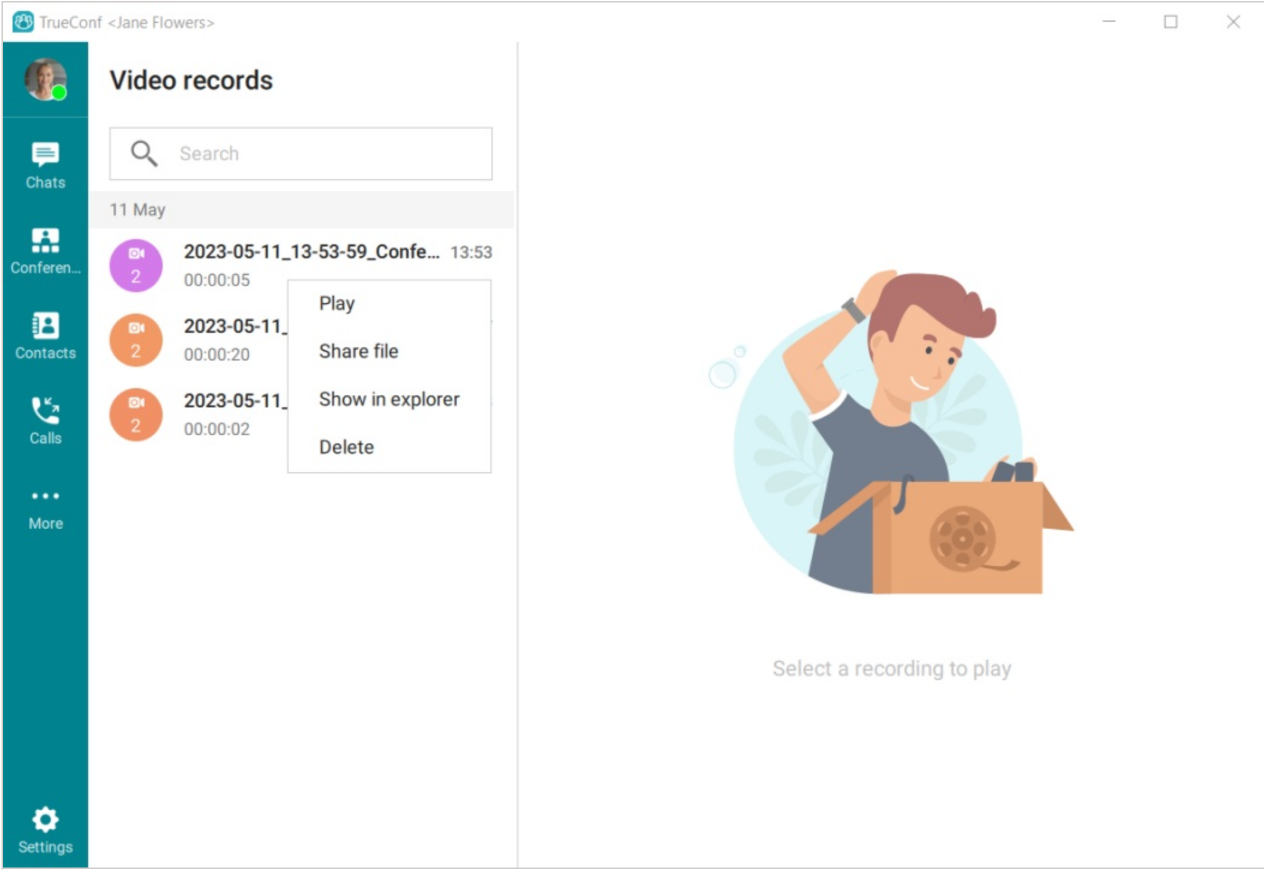
17.5. Selecting recording options

You can record video conferences in different formats and with different parameters. By default, recordings use **.mp4** format, but you can choose another one in the available formats: **.avi**, **.mkv**, **.webm**. You can also change the video recording resolution, but keep in mind that the maximum resolution depends on your computer performance and may vary from device to device.

If you uncheck the **Show participants' names in the recording** box, the recording will not contain user names.

17.6. How to watch conference recordings

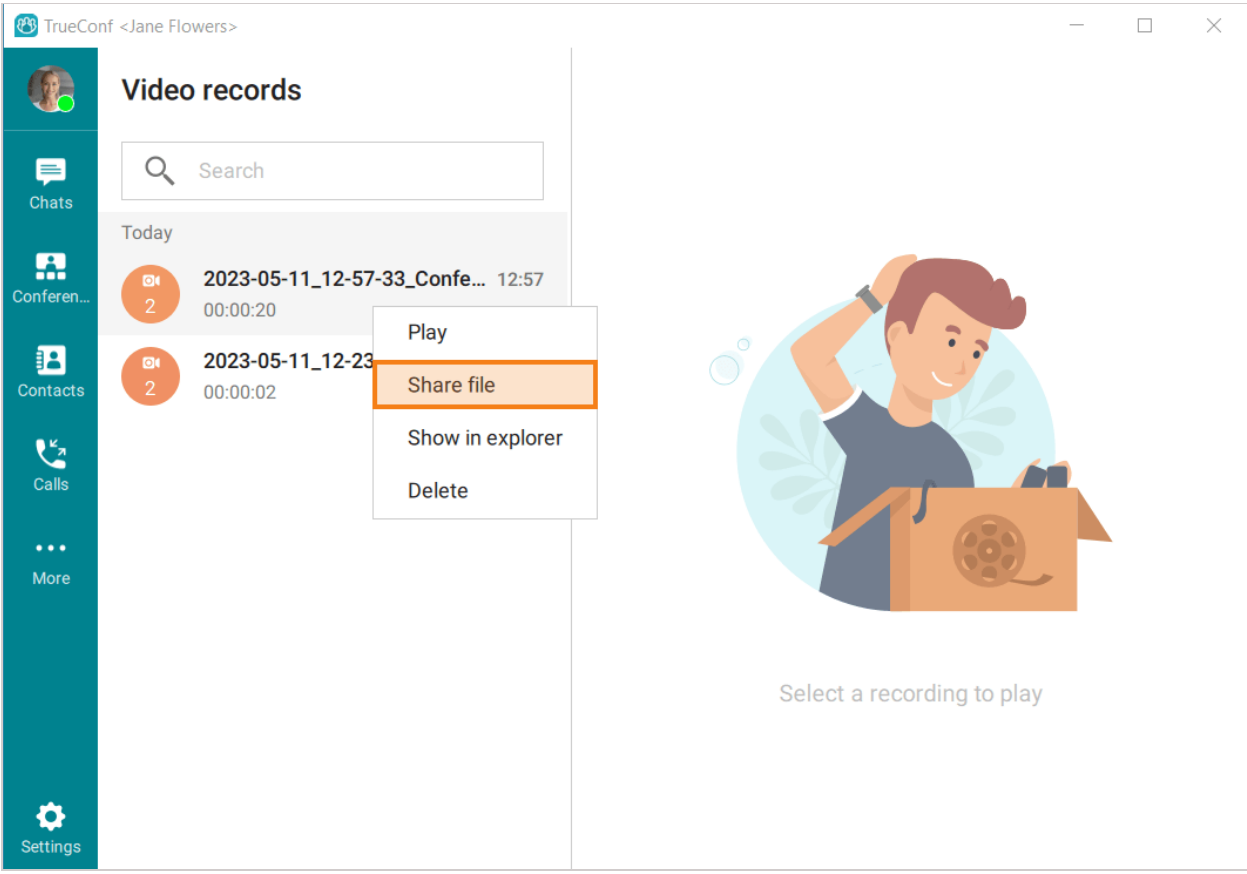
To view a conference recording, go to the **Recordings** section in the main menu and click on the selected video. You can also right-click on the video to open the containing folder and delete the file.



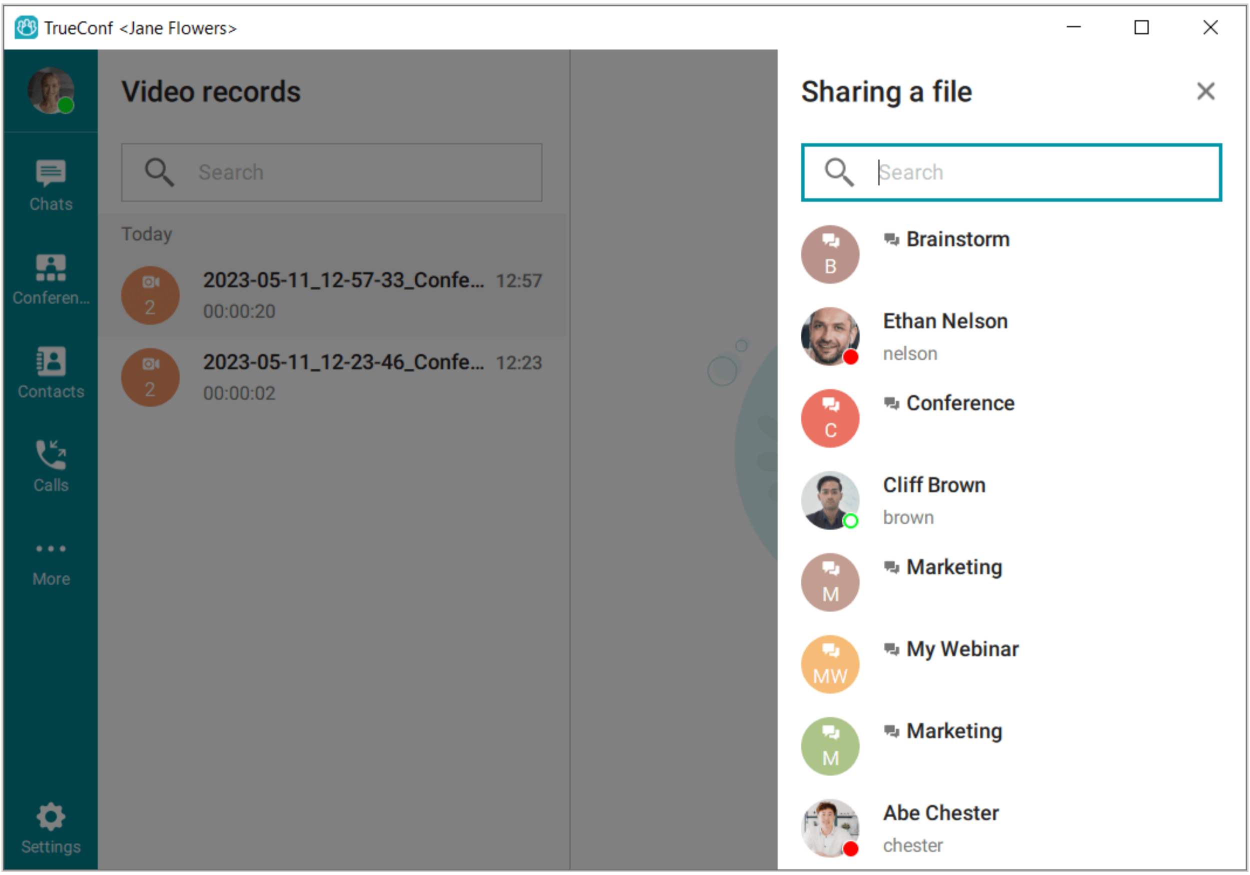
17.7. How to share a conference recording

You can also share a conference recording with another user. To do it:

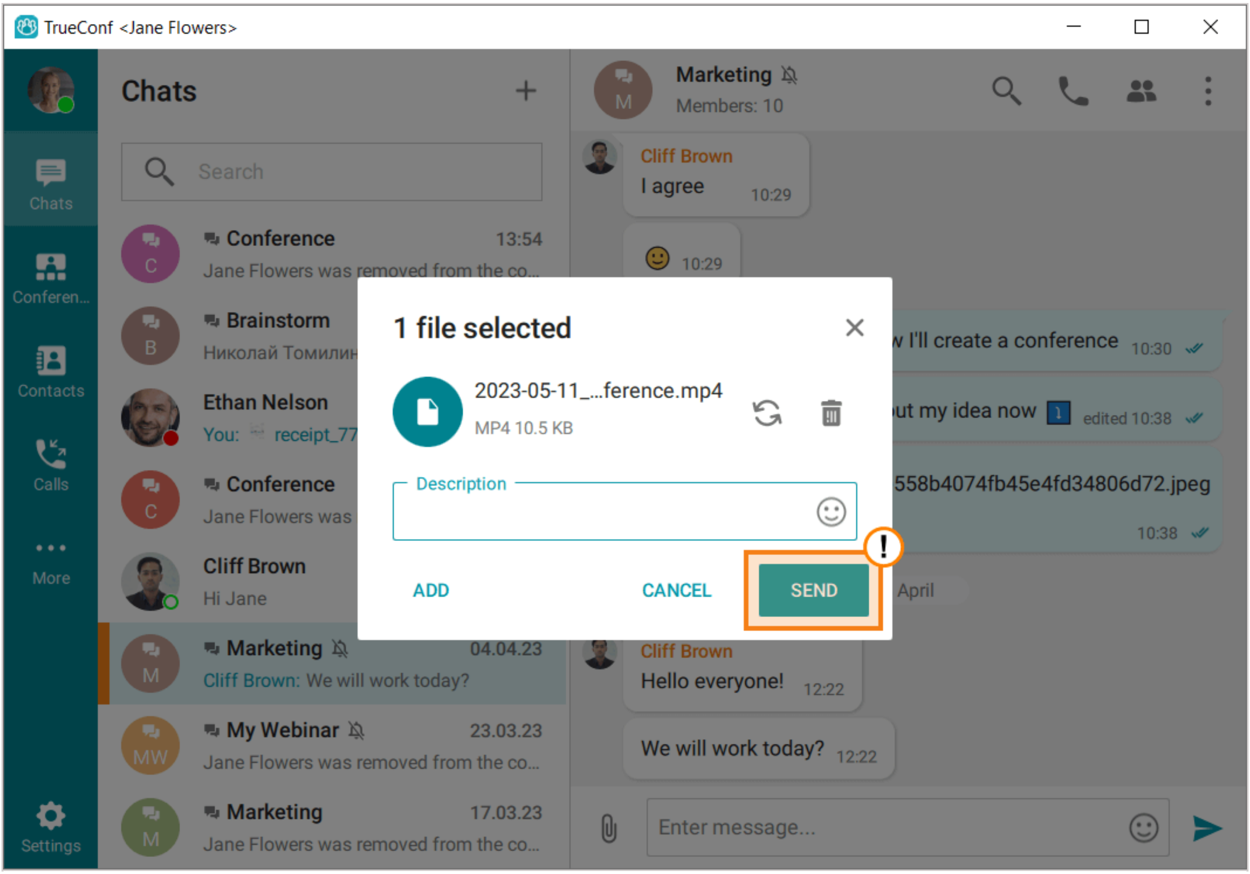
1. Go to the **Recordings** section.
2. Right-click on the selected video recording and choose the **Share file** option in the context menu:



3. In the opened panel, select a group or private chat where you want to send the recording.



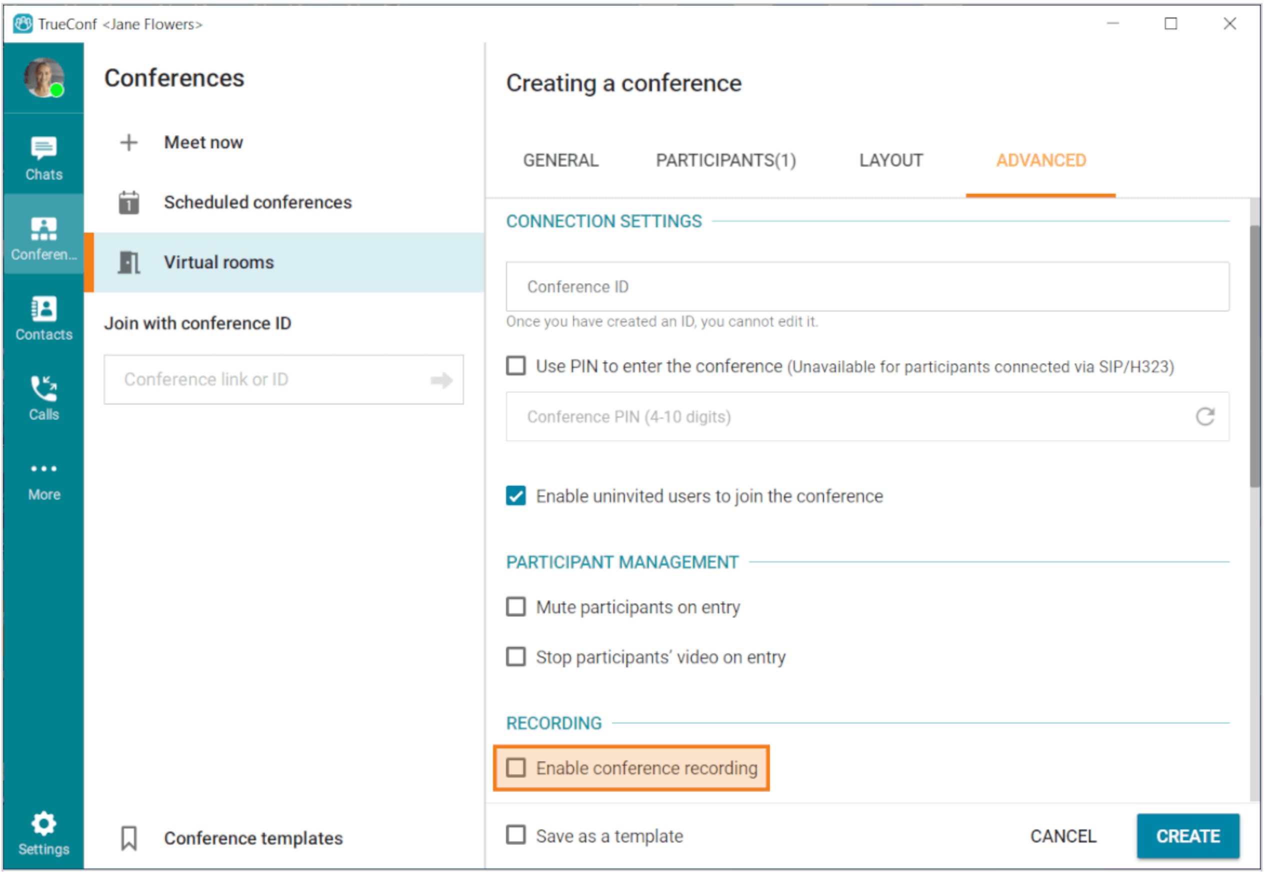
4. You will open the selected chat. If necessary, add a comment or other files, and click the **Send** button.



17.8. How the owner can download the conference recording saved on the server

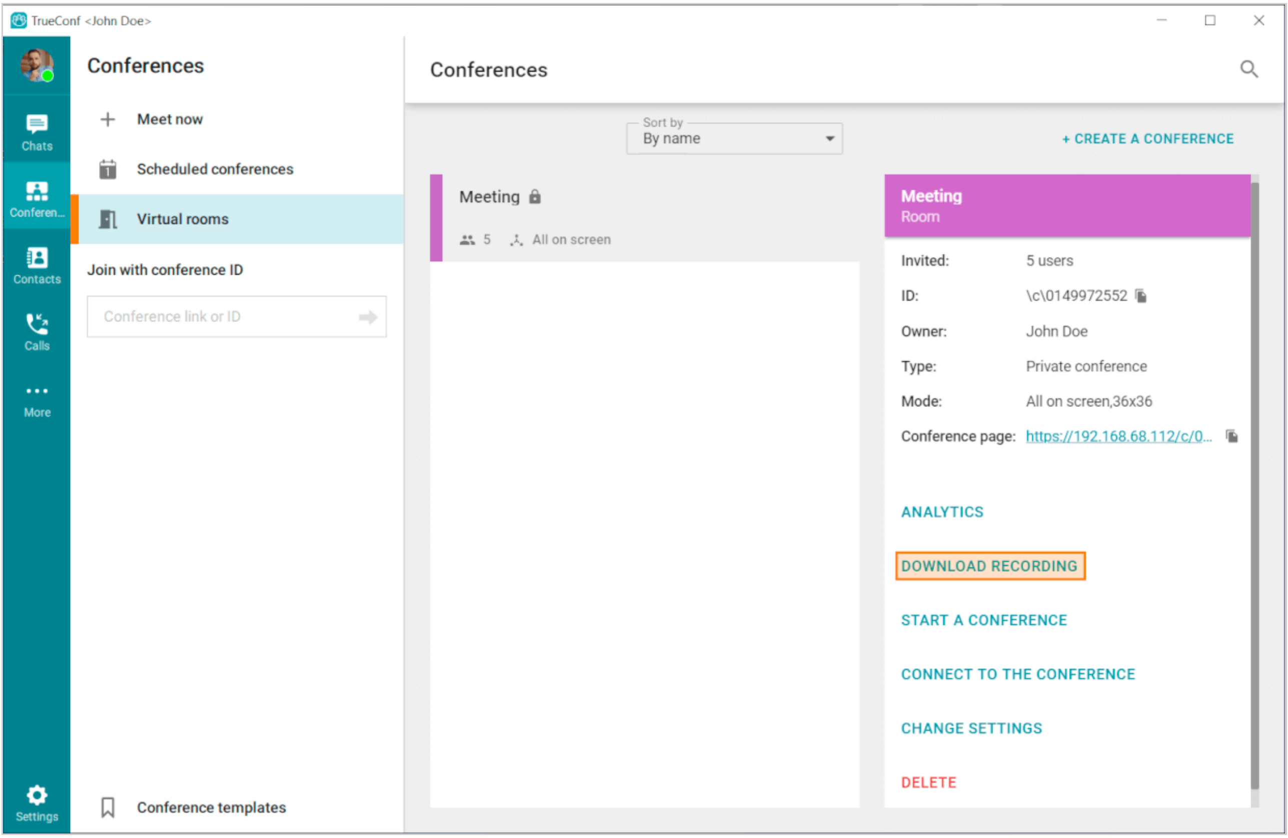
> *i* The recording saved on the server can be downloaded from a client application or the personal area only if the conference was created in the scheduler. Otherwise, you need to contact the administrator of your TrueConf Server.

The administrator can record all conferences hosted on your TrueConf Server. Unlike a recording made in TrueConf client applications, the recording made on the server side will have the layout with all presenters regardless of the permissions in the users' client applications. This recording can be made automatically or by the conference owner's request. In the second case, you will need to check the **Enable conference recording** box in the **Recording** section which is in the **Advanced** tab. You will need to do it when creating a conference.

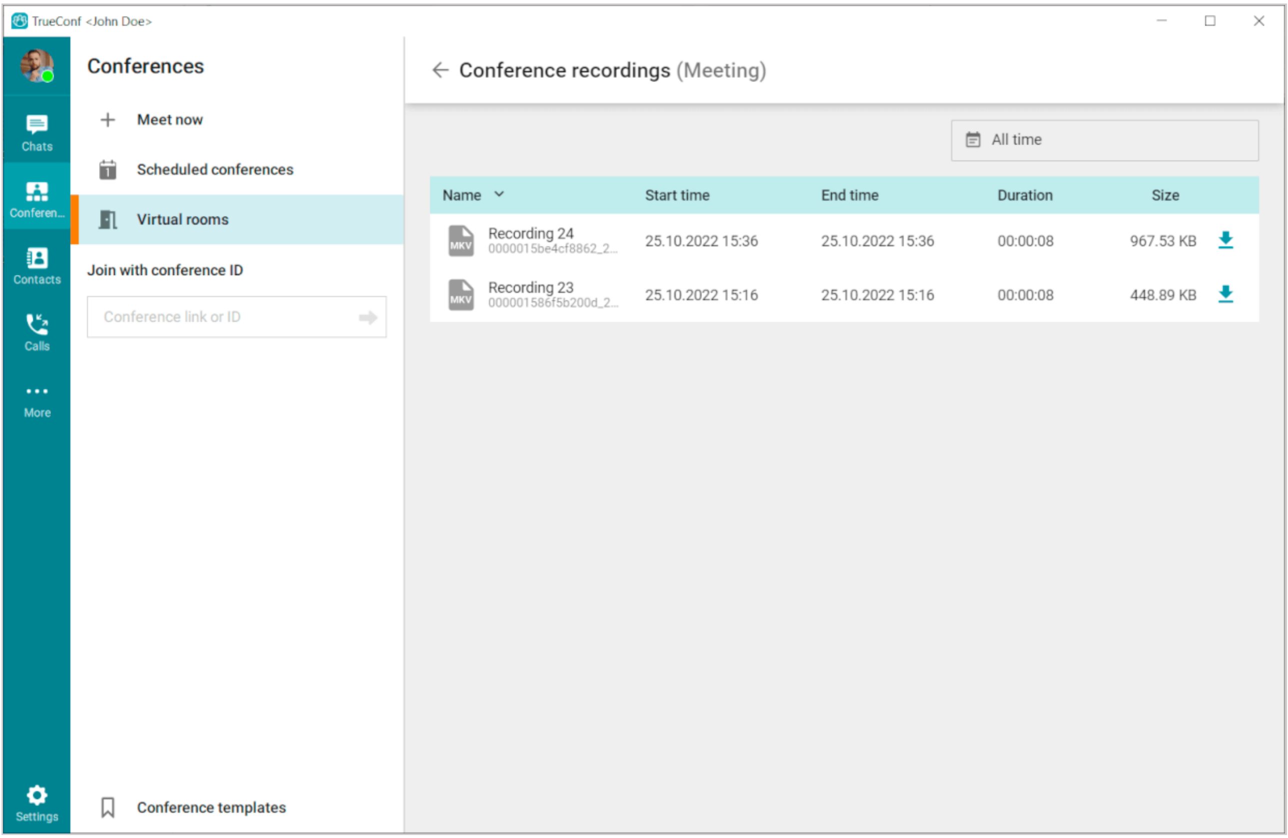


To download the recording of a conference where you are the owner, go to the **Conferences** section by clicking on the button. Then, click on the selected conference or a virtual room. In the new menu, click on the **Download recording** button.

> *i* Please note that this feature is available only if the administrator has marked the corresponding checkbox on TrueConf Server.



If there are multiple recordings of a conference, the **Conference recordings** button will be displayed instead of **Download recording**. If you click on this button, you will see the list of available recordings. To download the selected recording, click on the button.



18. Content sharing

18.1. Slideshows

During video conferences, participants can not only hear and see each other, but also share content or show slides.

If a participant permits video recording in the application settings, his/her slideshow will also be recorded.

Importing slideshows from **ppt** and **pptx** files is available only in TrueConf for Windows and requires Microsoft PowerPoint preinstalled on your computer.

TrueConf for Android for Android and iOS users can share content instead.

18.1.1. Supported formats

You can import slideshows in the following formats: **ppt**, **pptx**, **odp**, **slides** and **pdf** file pages.

To import presentations in the **.odp** format, you need to have LibreOffice or any other ODP editor installed on your computer. You can check if the required software is installed by going to the **Settings**, then to the **Tools** section and finding the **Document management** option. If the path to the editor is empty or if you see an error message below, click the **Construct Automatically** button in the **Path to ODP editor** section. If the path cannot be detected automatically, you can specify it manually.

You can also create a slideshow from your pictures right in the application or add some pictures to the list of the slides imported from a slideshow or a PDF file. For images, you can use **jpeg, png, gif, jpe, jif, jfif, jfi, bmp, png, gif, webp** formats.

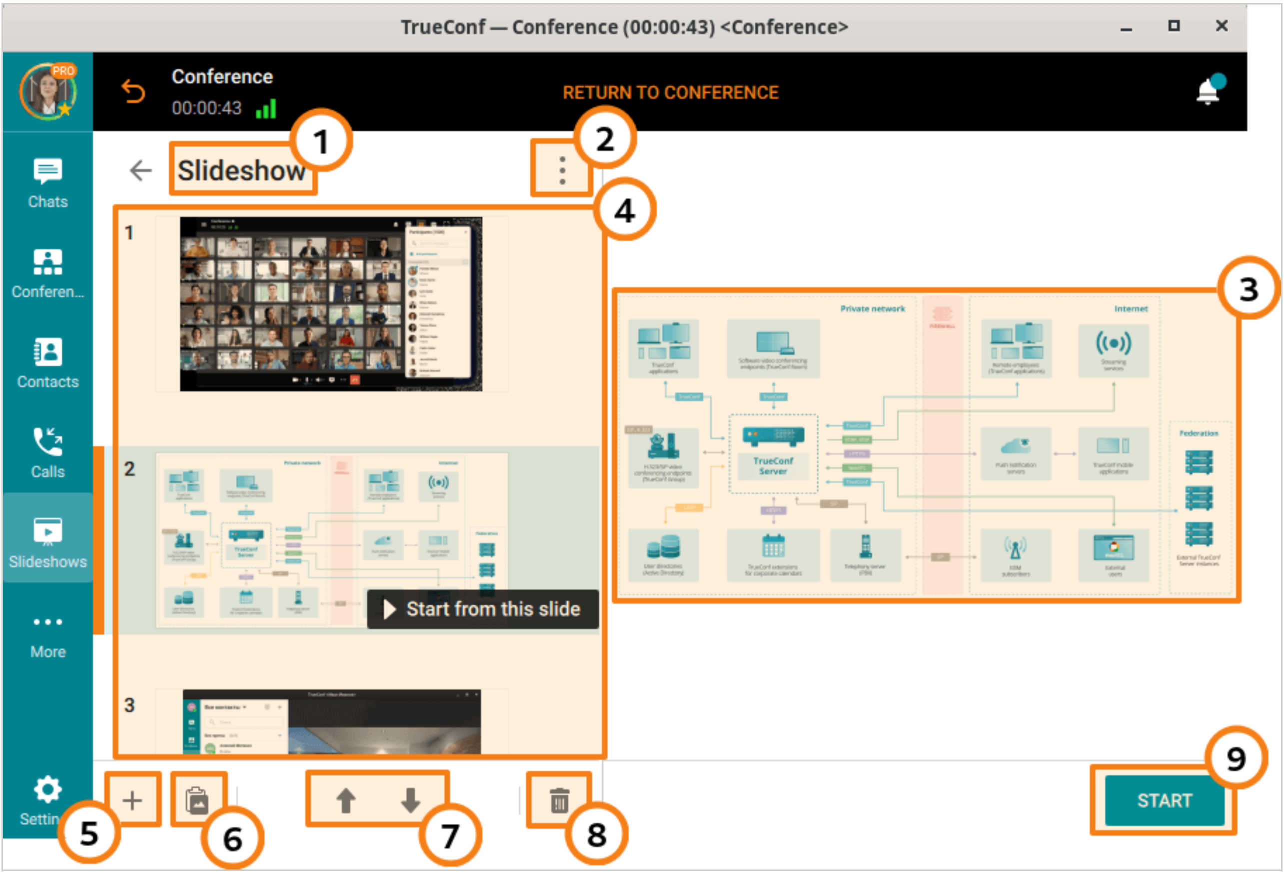
> Please note that when **gif** files are used, only the first frame will be visible.

18.1.2. How to show slides

During a call, click on the button in the meeting control panel. Go to the **Slideshow** tab. Here, you can check the **Share audio** box. In this case, you can show slides and stream audio from your OS at the same time.

> Please note that the audio will be streamed from your OS and not from the slideshow. Your presentation can be accompanied by the background audio from any other application. You can activate audio streaming when the slideshow has already started. To do it, click on the button. In the new window, check the **Share audio** box. Audio streaming is also available when sharing content. This feature can be enabled in the same way.

To add a new slideshow, click on the **Create a slideshow**, enter its title in the input field, and click on the **Create**. Next, the slideshow will be opened in the editing mode:



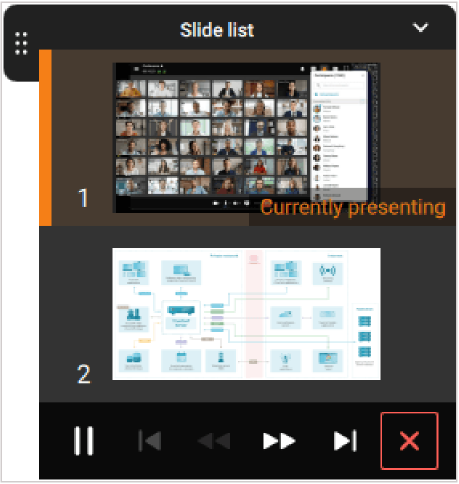
1. Slideshow description
2. In this menu, you can:
   - Rename the slideshow
   - Save the slideshow locally on your computer with **.slides** extension
   - Delete the slideshow

3. Selected slide preview
4. List of slides
5. Adding files to the list
6. Pasting a file from the clipboard
7. Moving files **up** and **down** on the list (you can drag files to change their order)
8. Removing slide
9. Starting the slideshow (available only when the conference is ongoing)

When images are added to the slideshow, click **Start** to begin the presentation (starting from the first slide). To start the slideshow from any other slide, select the slide and click on the button **Start from this slide**.

> *i* To make your slides visible for SIP/H.323 endpoints, switch BFCP and H.239 protocols on the server. To learn how to do it, read our article.

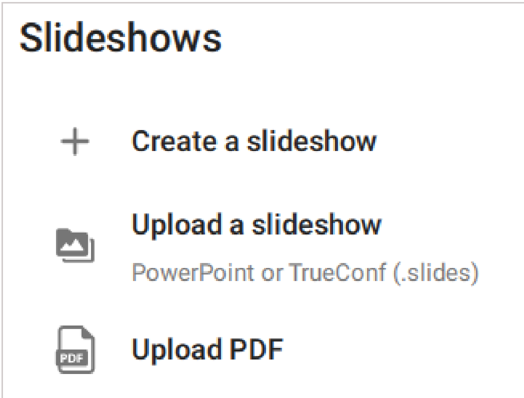
You can always pause the slideshow. To do it, click on the button which is in the slideshow control widget.



One can resume the slideshow in a similar way: click on the button .

18.1.3. How to upload and save a slideshow

In the menu, select **Slideshows** to create a new slideshow, import slides from a previously saved one (in .slides format) and open a PDF file.



Click **Create a slideshow**, enter its name and add slides to the list. You can now use the slideshow in a conference.

Exit edit mode by clicking at the top of the application. You now have the list of all slideshows you've added:

You can edit the slides, save them locally on your device and show them during a conference.

18.1.4. Opening a PDF file

18.1.4.1. Preliminary settings

This setting is only available in TrueConf for Windows.

PDF file import is available by default in TrueConf for macOS client applications thanks to the PDFKit system library. Please note that PDFKit is available only in macOS 10.4+ versions. If you are using an earlier version of macOS, you will not be able to import PDF files in the application.

In TrueConf for Linux client applications, this feature is also available by default, because all the necessary libraries will be installed along with the application.

If case of any problems or additional questions about this feature, please contact our technical support.

To use PDF files, you must have the Ghostscript plugin installed in the system.

If the TrueConf Server administrator has configured all the required settings, the button will be displayed in the **Slideshows** section of the main menu.

If there is no button for importing PDF files, you can configure this feature. To do it, take the following steps:

1. Contact TrueConf technical support and request the archive with pre-compiled Ghostscript libraries.
2. Unpack the archive.
3. Copy the file for your OS (`GSDLL64.dll` for 64-bit version and `GSDLL32.dll` for 32-bit version) to the `%localappdata%\TrueConf\Client` path.
4. Rename the file to `gs.dll` .

18.1.4.2. PDF file import

To import PDF file pages into a slideshow, click on the button when creating it.

If the administrator had configured all the required settings on the TrueConf Server side, but the plugin is not installed, you will see the **Framework settings** pop-up when trying to import a file. Click on the **Install** button to automatically download the plugin.

The plugin is installed from your video conferencing server. If there is any download problem, please contact your server administrator.

18.2. Desktop sharing

During conferences and video calls, you can use a client application to share your screen or separate application windows (including browser windows).

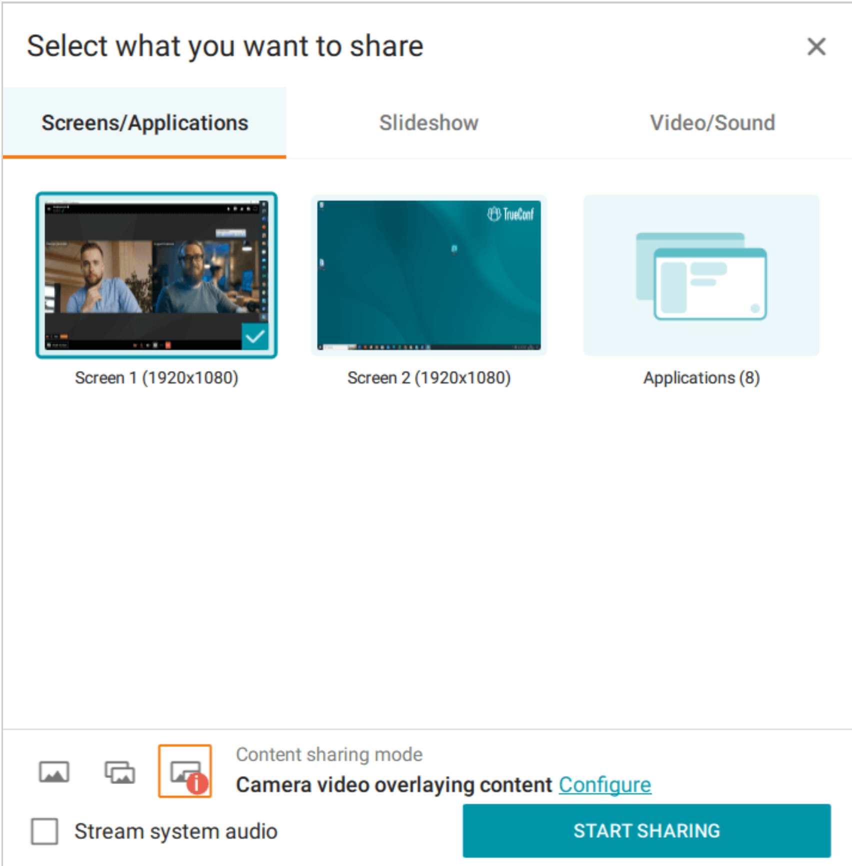
The content will be seen by all participants connected via TrueConf client applications and browsers (via WebRTC). Besides, the content shared during a conference can be recorded (only if the participant who is presenting the content had previously given the corresponding permission in the **Tools** section of the application settings).

Only maximized windows are correctly displayed during content sharing. Minimized windows will not be shared.

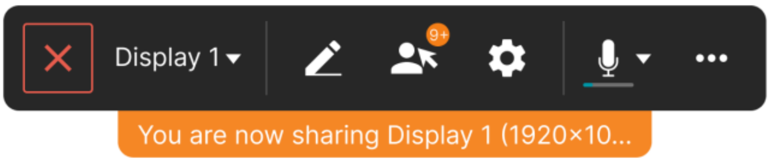
To switch to sharing content during a video call or group conference, click on the button in the control panel.

In the new menu, select the screen or application window that you want to share. If you want to stream audio, check the **Share audio** box. Next, click on the **Start sharing** button.

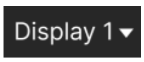
> *
> When you will be sharing content, audio will be streamed from the OS and not from the selected window. As a result, the content will be accompanied by the background audio from other applications. Audio streaming can be activated when content sharing has already started. To do it, click on the  button. Then, check the **Share audio** box. This feature is also available during a slideshow. It can be activated in the same way.



Then, the application window will be minimized and the stream control widget will be displayed in the upper part of the screen. It will be displayed on top of other windows all the time while the content is shared. Other meeting participants will see your self-view instead.



The translation control window contains the following elements:

- The title of the shared screen/application will be displayed in the lower part of the window.
-  button to minimize/expand the widget.
-  button to disable content sharing: when clicked, the minimized window of TrueConf client application will be maximized.
- the button where the name of the content source is displayed (check  on the screenshot): select the content source, enable/disable audio streaming

- button for annotating over the shared content (to learn more about this feature, check out the [corresponding section](#page17-demonstrated-content-drawing)
- button to view the list of participants who gained [remote control over your desktop](#page18-desktop-control-settings) during a conference (here you can disable this option)
- button for adjusting the settings of content sharing (select if content should be shared in the user's video window or in the separate stream) and video area display

> The widget video area can also be hidden, just hover the mouse over it and click on the **Hide** link in the center.

- button to select and configuring the microphone
- button to make an audio reply (available only if the microphone is muted in any conference except the smart meeting)
- button to switch to the additional conference controls.

By clicking on the button and selecting **Show my video and content in separate windows** , you can share content with conference participants as a separate stream. This way, the shared content can be viewed on third-party video conferencing endpoints (via BFCP/H.239 protocols).

18.2.1. Streaming web camera feed when sharing desktop

When sharing the desktop, you have several options for streaming the feed from your web camera. Check the menu for selecting the mode at the bottom of the **Select what you want to share** window.

There you will find three buttons needed for selecting the mode:

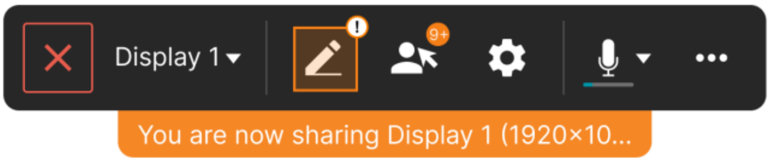
- **Only content**
- **Camera video and content in separate windows**
- **Camera video overlaying content** — when this option is selected, the additional **Configure** link will be displayed. This link opens the menu where you can select the size and position of the overlaid webcam picture (self-view). Additionally, there is the **Hide my background** box that enables you to remove the background from your self-view.

When the required streaming mode is selected, click the **Start sharing** button.

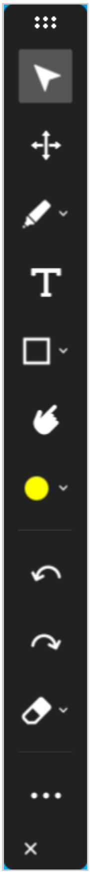
18.2.2. Annotations over shared content

You can always make annotations over the shared content. This will make your presentation more vivid and interesting. To start annotating, click on the button in the stream control panel.

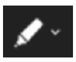
> Content annotation tools can be accessed only when the entire screen (not just one of the application windows) is shared in the user's video window. If content is shared in the separate stream, annotation tools will be unavailable.

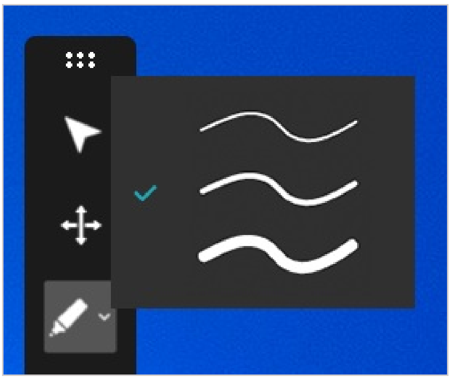


The panel with drawing tools will be displayed in the left part of your screen.



This widget includes the following buttons:

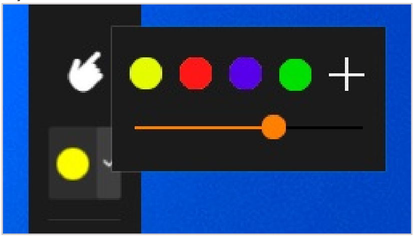
-  button that enables a user to switch to the OS mouse cursor (needed for switching from annotation tools to the OS control mode).
-  to drag annotations. Click on this button, point the mouse to the selected object and drag it to the new location.
-  button for drawing. By clicking on the arrow next to the marker icon, you will open the menu for selecting brush width.



- button to create text blocks. To change the size of a text block and font size, click on the button , select an area on the shared screen, and start typing.
- button to add standard figures like

a rectangle, square, or star.

- button to activate the pointer which helps to draw the audience's attention to a specific part of the screen.
- button to select the color of drawings and text. Four colors are available by default: yellow, blue, red, and green. It is also possible to add a color by clicking on the button . When you click on this button, a new window will open. Here, you can select the required color. To set the color transparency, use the orange slider which is displayed above color circles.



- buttons and to undo and redo the last action respectively.
- button to delete created objects. To delete an object, just left-click on it (the tool should be preliminary selected). You can also delete all objects. To do it, click on the arrow which is next to the eraser icon and select **Clear all annotations** in the context menu.
- button that opens the menu with additional options. Here, you can change the panel orientation (vertical or horizontal) and save a screenshot of the shared window.

To close the annotations panel, click the button which is in the lower part of the sidebar.

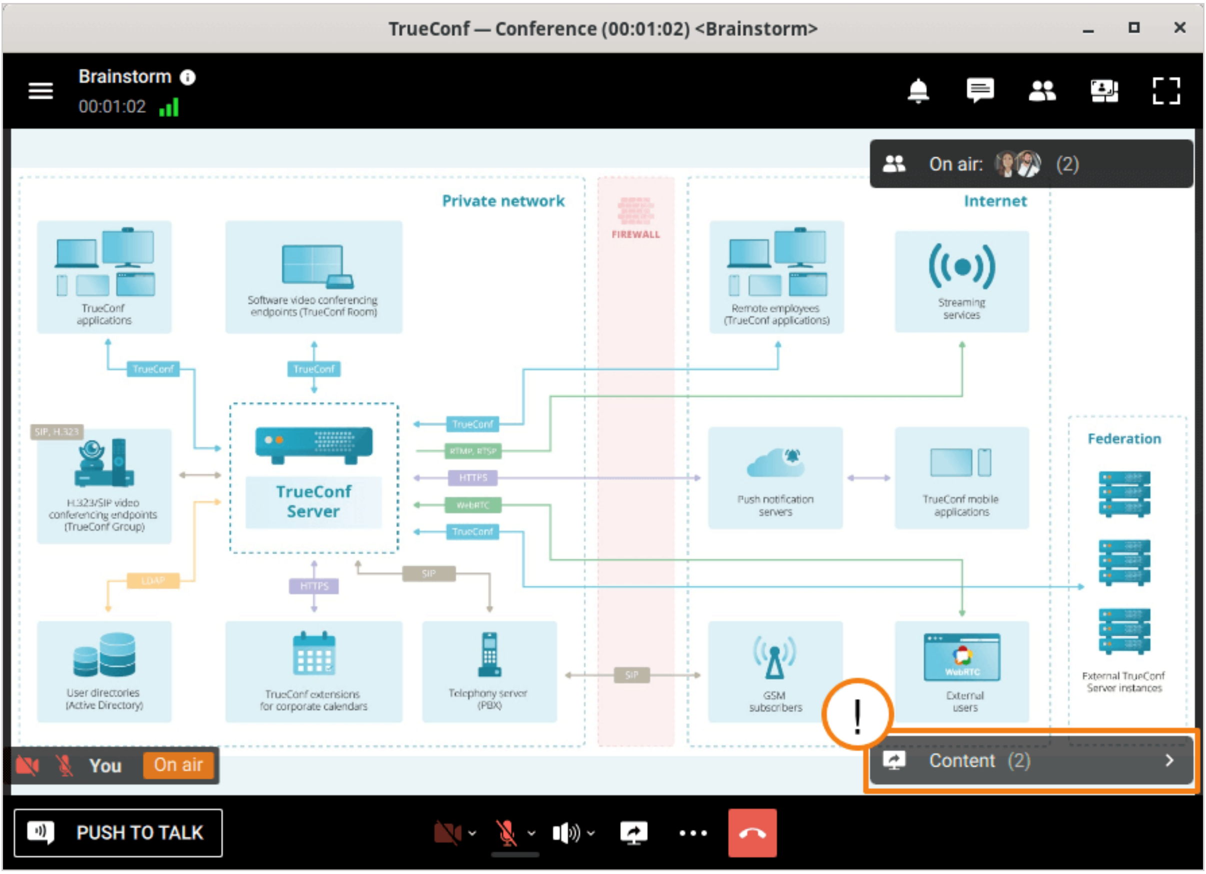
18.2.3. Sharing multiple screens

During a meeting, multiple speakers may share their screen or separate application windows. In this case, participants have a useful option to switch between the screens or move the video window to an additional monitor so that they don't miss a single detail.

18.2.4. How to switch between multiple contents and slideshows

If multiple participants simultaneously start content sharing or a slideshow in a separate window, you can select the stream that you want to see. To do it, take the following steps:

1. In the conference window, click the **Content** button displayed in the lower section on the right side (not to be confused with the content display button on the real-time meeting management panel):



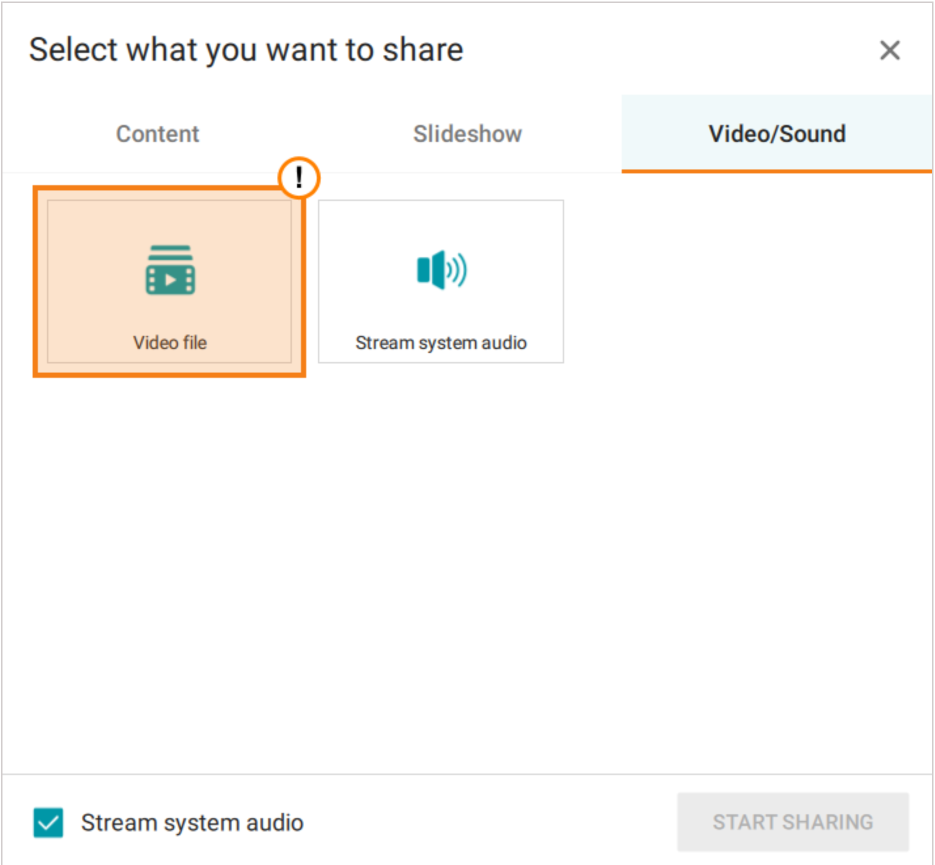
2. In the context menu, select the name of the user whose content you want to see.

18.2.5. Streaming video files

You can also stream video files during a conference. To do it, take these steps:

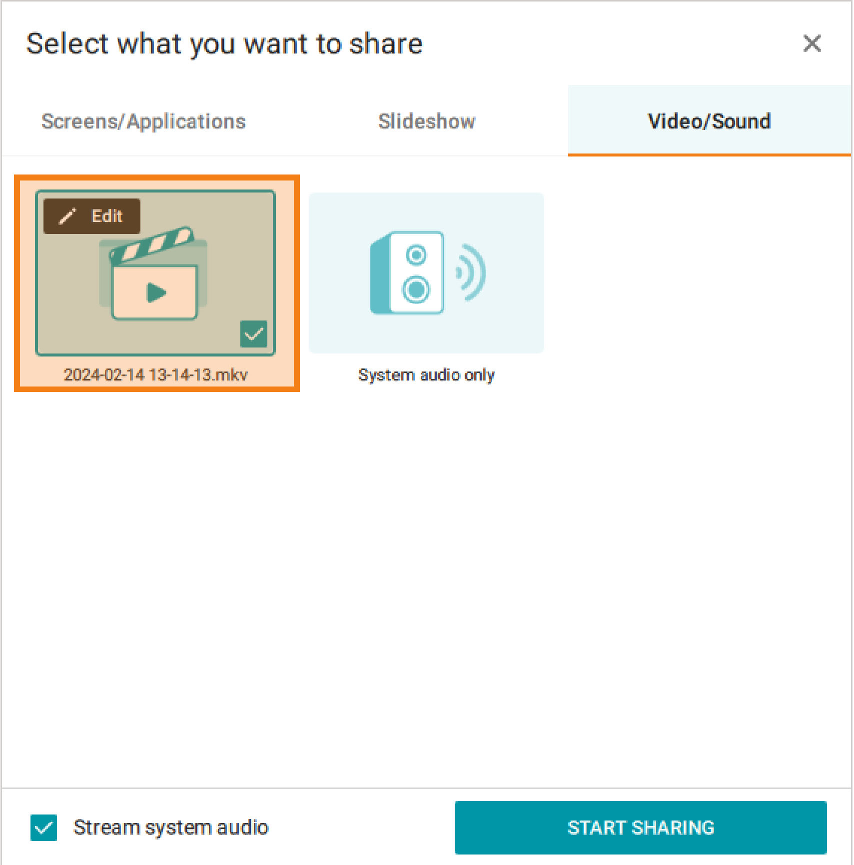
> The following file formats can be used for streaming: avi, mkv, mp4, and webp. Video and audio streams in the file must be encoded with supported codecs.
>
> Supported video codecs: h264, h265, vp8, h263, h263+, h263++, h261.
>
> Supported audio codecs: pcm, opus, aac, mp3.

1. Click on the button in the meeting control panel.
2. Go to the **Video/Sound** tab in the pop-up window.
3. Select **Video file** in the opened tab:

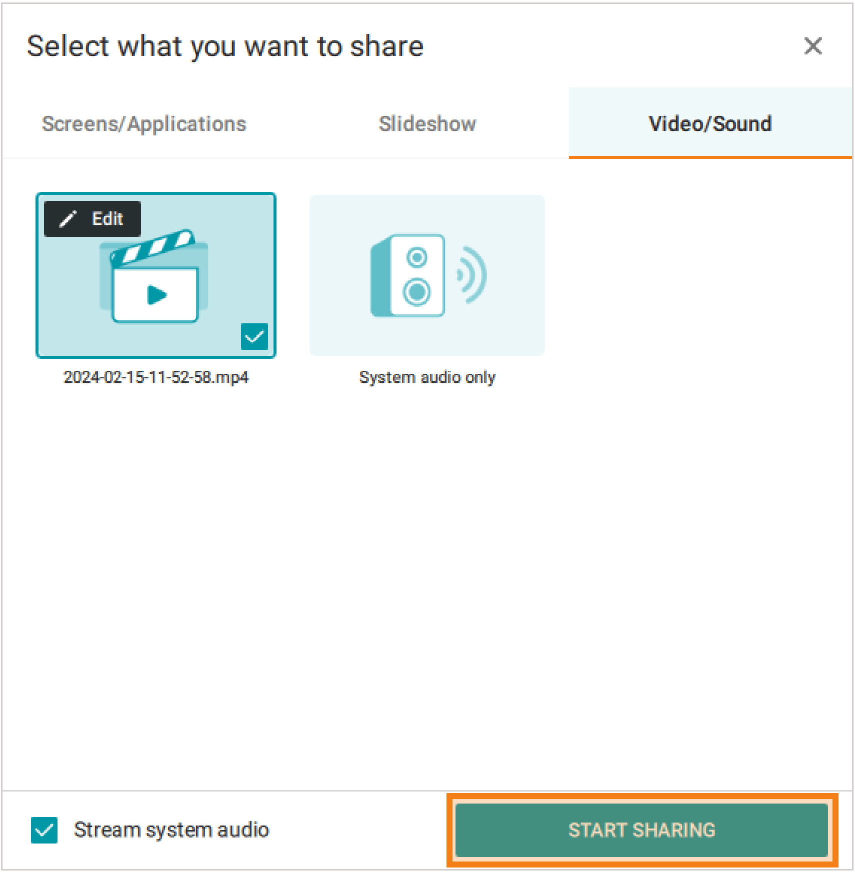


4. The file explorer will open on your OS; here, you need to select the file that will be streamed.
5. Then in the **Video file** section, you will see the name of the uploaded file. Additionally, there will be the button . By clicking on it, you can select a different file for streaming.

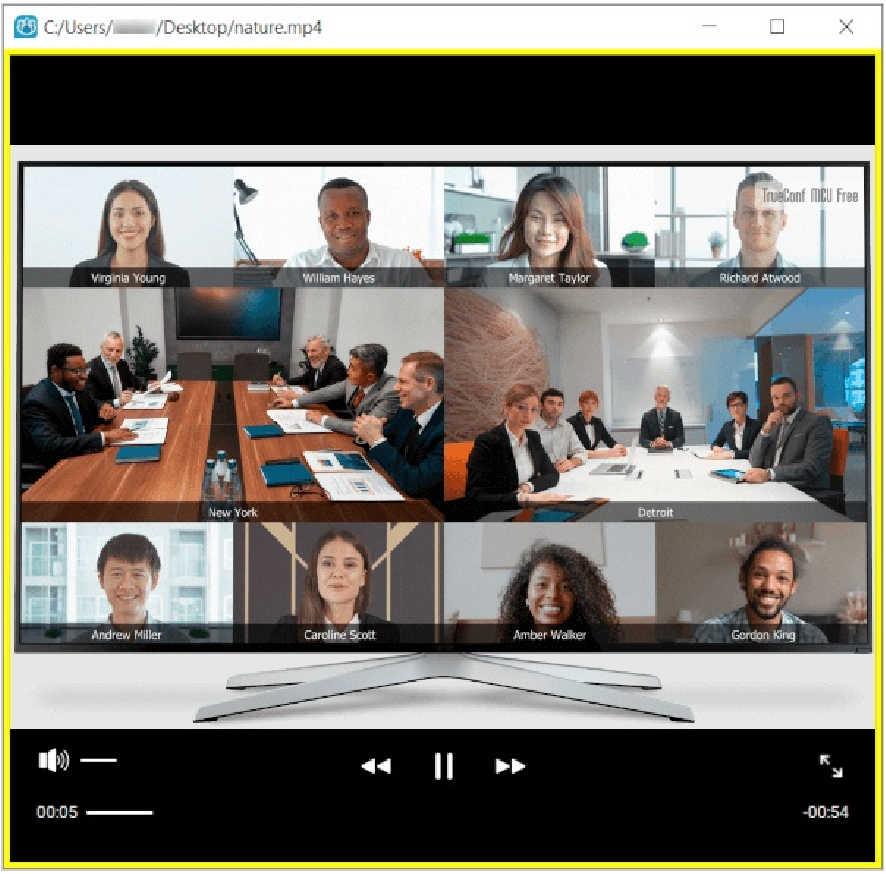
> The box **Stream system audio** will be checked by default. If you uncheck this box, meeting participants will not be able to hear the audio track from the video file.



1. Click on the button **Start sharing**.



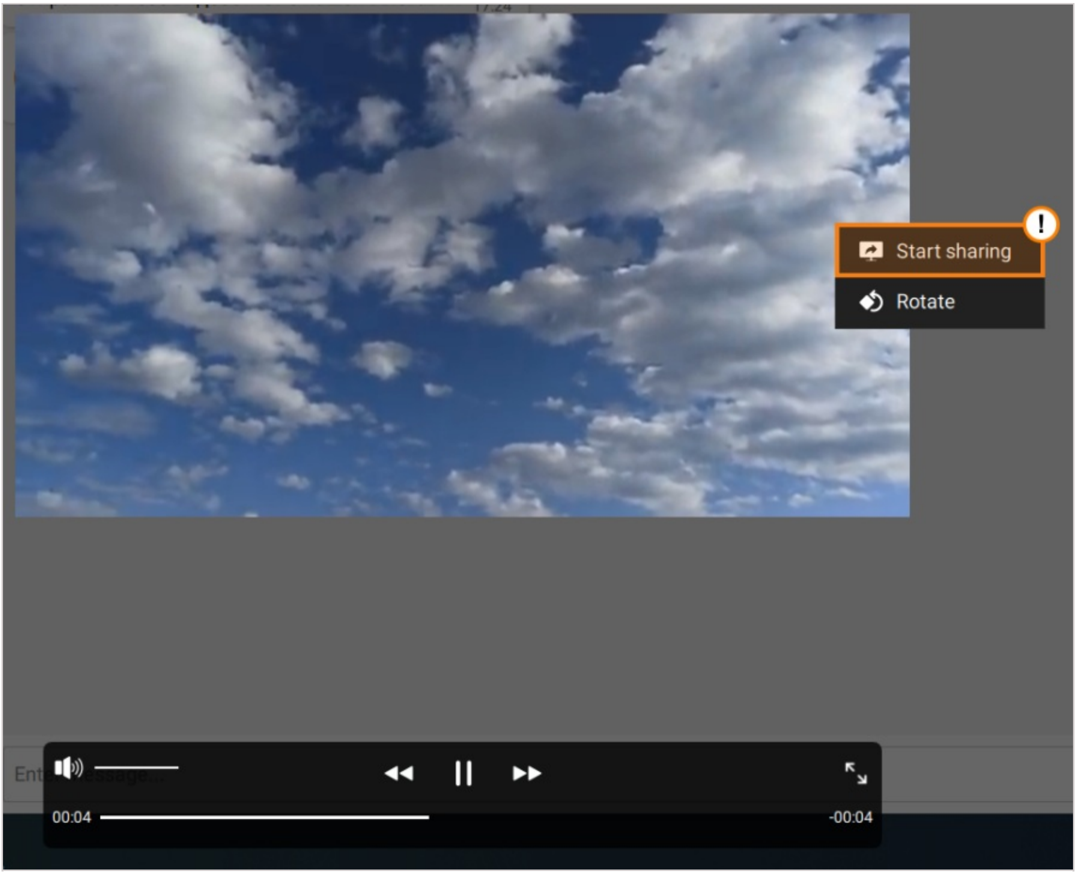
Video file streaming will begin. There will be a separate window for managing this stream. When the video is over, it will be replayed.



To end streaming, close the stream management window.

You can also start streaming right in your private messages. To do it:

1. During a conference, go to the chat with the file that you want to stream.
2. Click on a file to open the video with the built-in media player.
3. Right-click on the video and select the **Start sharing** option in the context menu.



Similarly to video files, you can start streaming any conference recording that had been saved previously (go to the **Recordings** section of the main application menu).

18.2.6. Streaming system audio

You can stream the audio from your operating system without sharing video. For example, you can play a sound track in the media player for your colleagues. To do it:

1. Click on the button  in the meeting control panel.
2. Go to the **Video/Sound** tab in the pop-up window.
3. Select **System audio only** in the opened tab.

Each of the conference participants will hear all sounds played at the system level, including audio from media players, browsers, etc.

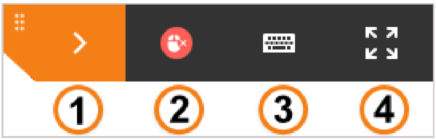
19. Remote desktop control

> *i* This feature is unavailable when participating in a conference created on the TrueConf Online cloud service.

During video meetings, you can take control over the desktop of the participant who is sharing content.

To this end, click on the mouse icon at the right edge of its video window.

After you have been allowed to control the desktop, the control panel will appear in the upper-right corner of the video window:



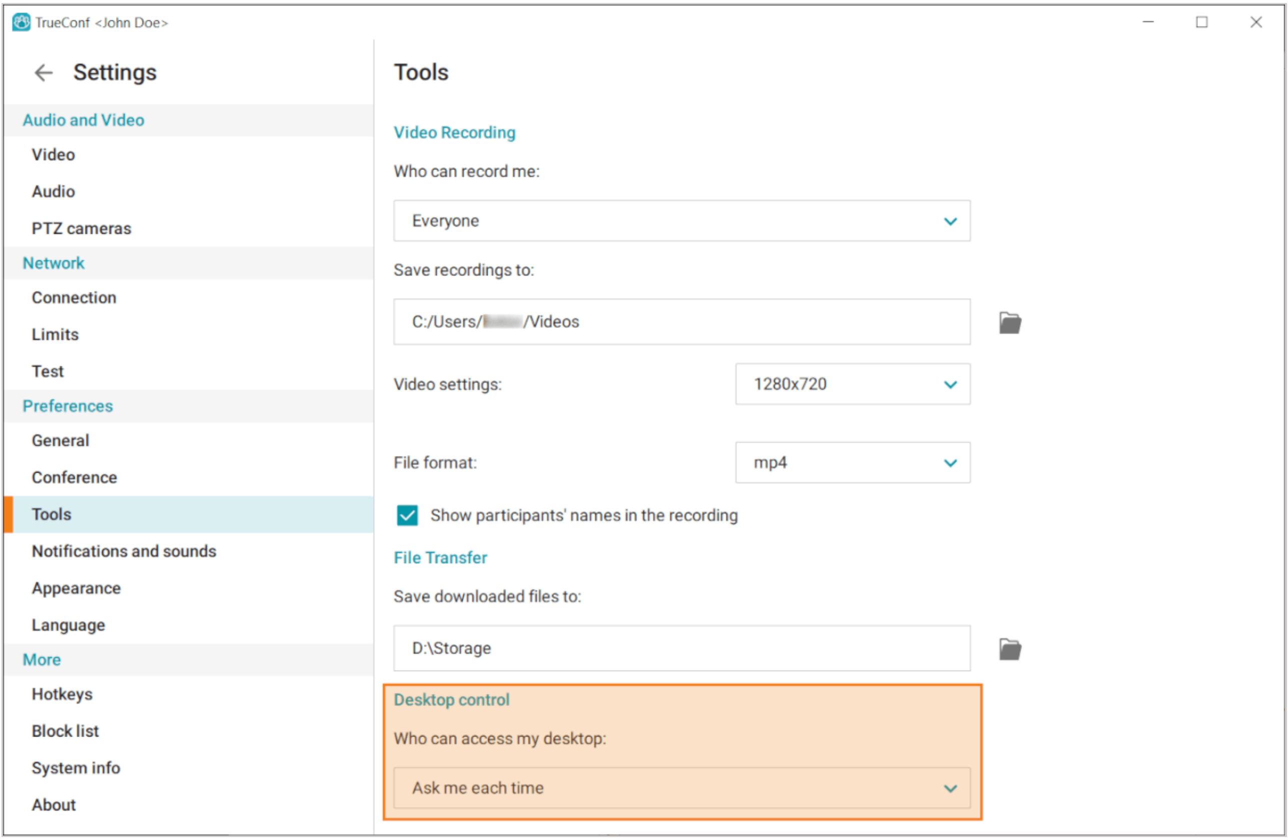
1. Collapse / expand the panel
2. Finish the remote control session
3. Keyboard input emulation
4. Display remote desktop control window in full screen.

> *i* The remote control of a participant desktop may be unavailable if this feature was disabled for this participant on the side of TrueConf Server.

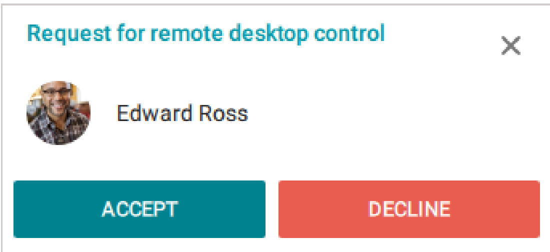
19.1. Configuring access to your remote desktop

You can set up remote desktop control policies in the client application settings: enable all users in your address book to access your remote desktop, disable users to access your remote desktop, or enable users to access your remote desktop on request.

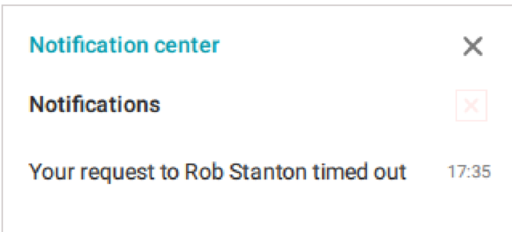
To do so, go to **Settings →Preferences →Tools** and choose a corresponding option in the **Who can access my desktop** field.



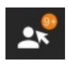
Ask me each time is a default setting; by selecting this option, you will be notified when someone tries to access your desktop control:



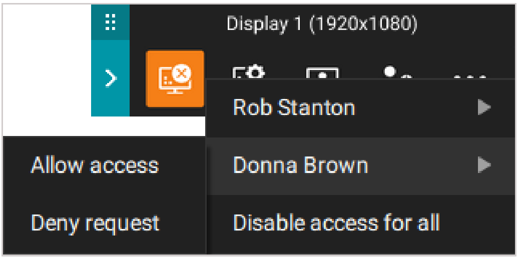
The notification will be visible for 100 seconds after which the user who has requested access will see the following message:



19.2. Can multiple meeting participants take control over your desktop simultaneously?

Several conference participants can request access to control your desktop. In this case, the button  will become active in the content control window.

Click on this button to grant access to one or several participants, or deny requests:


Display 1 (1920x1080)
Rob Stanton
Donna Brown
Disable access for all
Allow access
Deny request

20. PTZ camera control

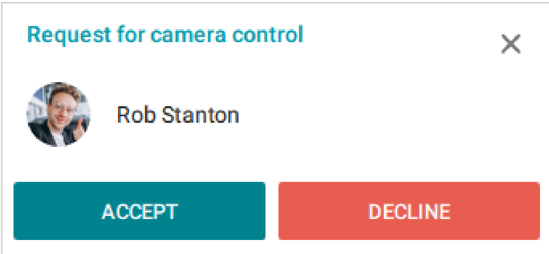
During conferences, you can rotate and zoom users' PTZ cameras (including cameras of video conferencing endpoints).

> *i* You can control conference participants' PTZ cameras only if you are a conference moderator.

PTZ cameras can be controlled via UDP/RTP/Q.922/H.224/H.281 protocols

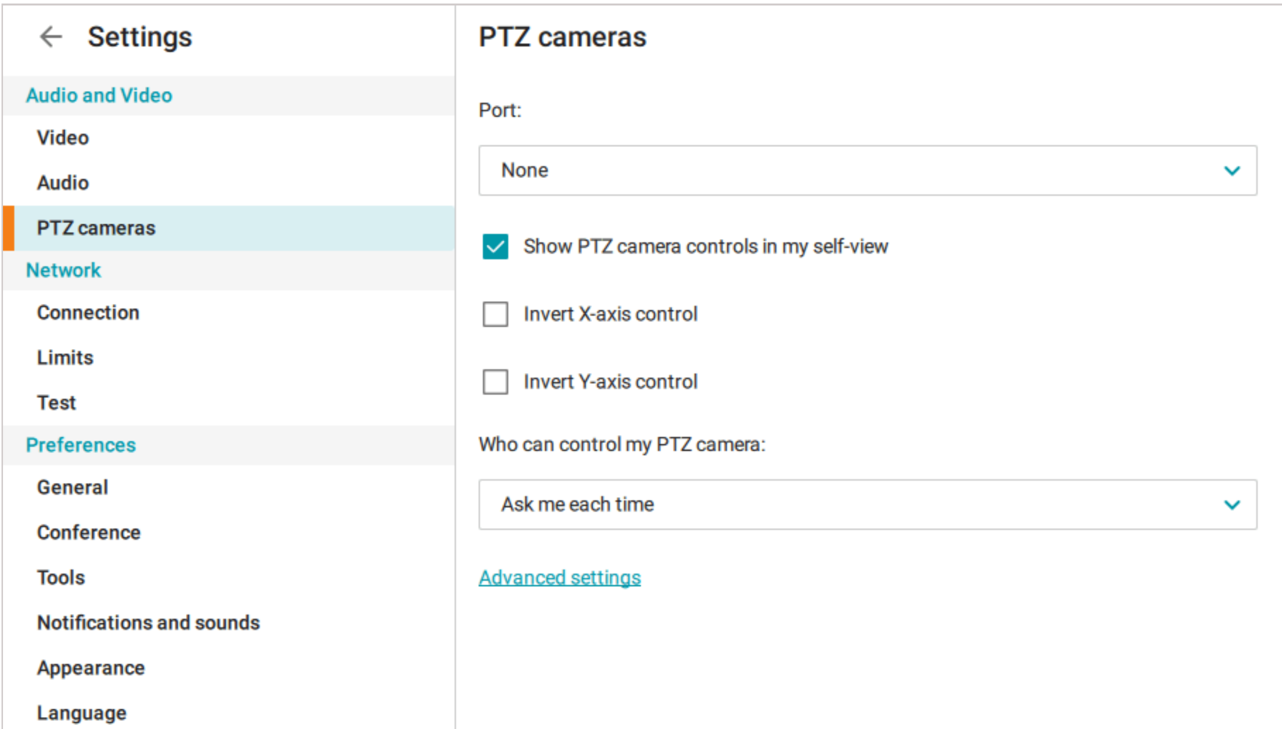
20.1. How to manage access to my camera

By default, PTZ camera control is available **on request**. This means that if you attempt to control a camera, its owner will see the notification about the request to take control of their camera.



In client application settings, you can disable this option. You can prohibit sending requests (thereby making your camera unavailable for external control) or allow all users to access your camera in one click without having to ask for permission.

To do this, go to **Settings →Audio and Video →PTZ camera control**, choose one of three options under **Who can control my PTZ camera** heading: **Ask me each time**, **Everyone** or **Nobody**.

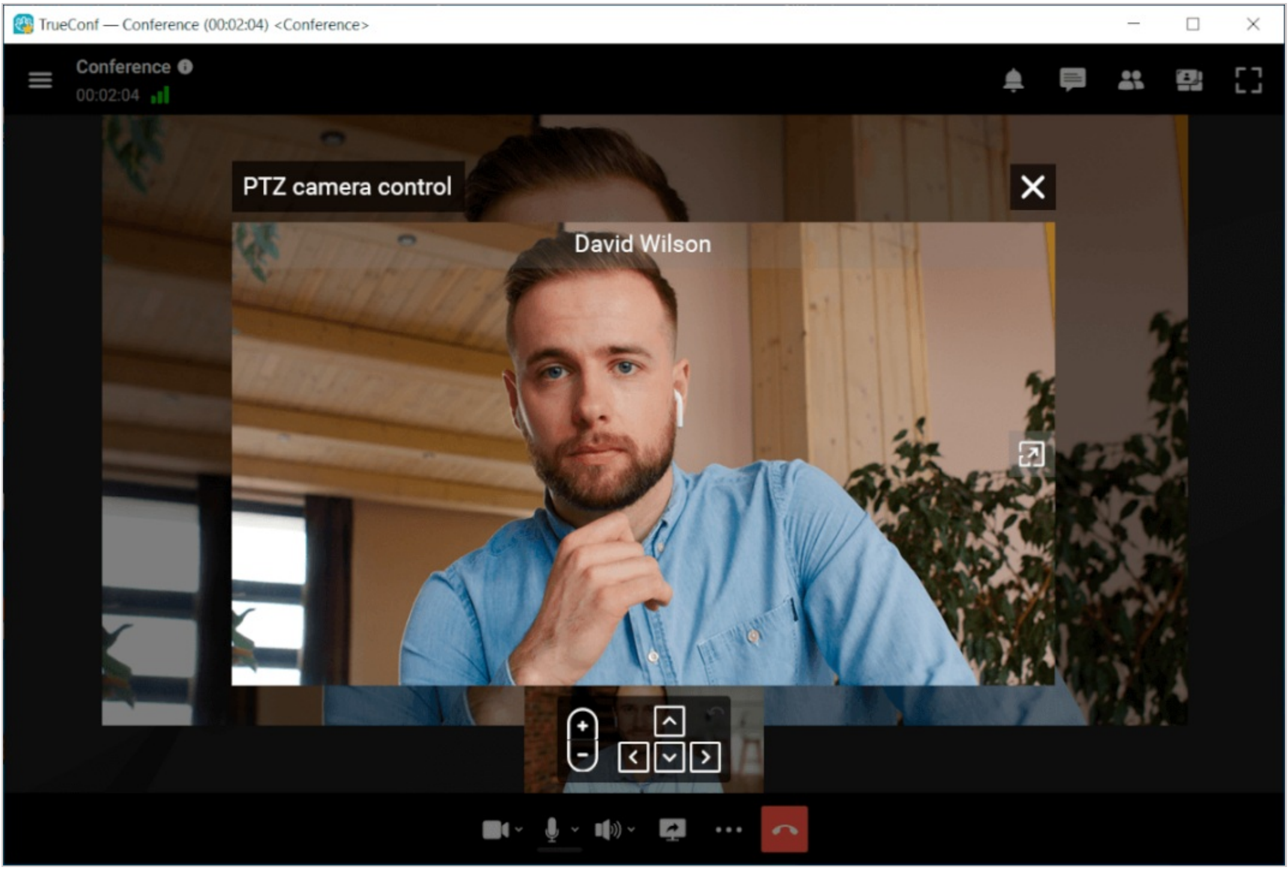


20.2. How to control other users' cameras

To control the camera, click on the button  in the user's video window or right-click on the video window and select **Control camera** in the pop-up menu.

If a user enabled **Ask me each time** in camera control settings, the application will prompt you to send such a request. The user will receive a notification about your request.

After you have been granted access, the camera control panel will appear in the center of your video window.



You will be able to control the camera either with the buttons on this panel or with corresponding buttons on the keyboard.

20.3. How to control my own PTZ camera

If you have selected a PTZ camera in the client application, the  icon will appear in the corner of your video window. By clicking on this icon, you will open the camera control panel.

