TrueConf Client Applications

User guide

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

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1. Installation and configuration

This guide will be equally helpful to Windows, macOS, and Linux users because TrueConf client applications for these operating systems have the same features and interface.

1.1. TrueConf desktop client application features

- Enjoy 4K (Ultra HD) video calls and conferences with a frame rate of 60 fps
- Run meetings with up to 1000 participants (up to 1600 using UDP Multicast mode)
- Try different video conferencing modes: video call (point-to-point or one-on-one video conferencing session), video lecture, all-on-screen, and role-based conference
- Private meetings for registered users and public webinars with guest connections
- Meet both with guests and users registered on TrueConf Server
- Schedule conferences, create virtual rooms, and send email invitations to meeting participants
- Point-to-point video calls can be run directly between the users bypassing the server
- Quick call-to-conference escalation
- 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
- Take polls or share reactions in conferences
- Call VoIP users, landline and mobile phone numbers and send DTMF commands
- Call SIP/H.323 and RTSP devices
- Automatically enlarge speakers in a meeting
- Highlight active speakers in the video window layout with a customizable color frame and set up microphone sensitivity level
- Remote desktop control
- 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 entire screen or separate windows. Both your video and content will be visible in recordings, streaming and on devices that do not support H.239/BFCP protocols
- Exchange messages and share files in personal and group chats. Your messages will be delivered even if your partner is currently offline
- Chat history, including group chats of the meetings that have already finished
- Control PTZ cameras, both your own and participants’ devices
- Record video calls and conferences, choose a suitable video format and storage location
- Configure your own video layout
- Conference moderators can lock video layout for all participants or set individual layouts for each user, including SIP/H.323 endpoints and browser participants
- Control participants’ cameras and microphones, change devices or adjust microphone sensitivity
- Add and remove participants while the conference is in progress
- Use virtual backgrounds
- Full address book support (adding and deleting contacts and groups, editing contact information, searching and blocking contacts)
- Automatic discovery of available servers
• Optional network speed limitation templates or manual settings
• Built-in tools for testing the quality of server connection
• Built-in algorithms of echo cancellation and automatic gain control (AGC)

1.2. Application installation
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®).

To show how TrueConf client application can be used, we will now take TrueConf for Windows as an example.

1.3. Connecting the application to the server
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 Server button.
In the window that opens, switch to TrueConf Server and enter the IP address or FQDN of your video conferencing server. Click the Connect button.

If the connection is successful, you'll see Connected to server.company.com in the upper right corner.
of the window.

1.4. Signing in
In the authorization window, enter your TrueConf ID (username) and Password. If you don’t know them, please ask your server administrator to provide you with your login details.
Then click Sign in.

1.5. Application settings
1.5.1. Video and audio
Click the Settings tab and select Hardware in the context menu. Next, select the camera, speakers, and microphone in the General tab.
In the **Recording Device** section, there are two checkboxes related to audio processing:

- **Echo cancellation**
- **Automatic gain control**.

These checkboxes are marked by default, and it is 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.

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.

To select sound notifications and the playback device, go to the **Application Sounds** tab.
1.5.2. Virtual backgrounds

We’d like to note that TrueConf allows you to replace your background with a custom image during video calls and group conferences. There is no need for a high-performing PC; this feature will be available on every computer that meets our minimum system requirements. It is based on chroma keying, a technique used for layering images.

Changing the background can be useful in many situations. For example, you can place a corporate logo during a webinar or select an image related to the topic of your video lecture.

You can achieve a better result if you are using a solid background of classic colors for chromakey: blue, green, purple. Small color gradients and variations are acceptable if they are shades of the main background color, i.e. close to it.

To change the background, take the following steps:

1. Go to the Settings → Hardware → General section.

2. Click the icon and select the background image. It will be adjusted to width of your video window. We advise you to select the image that matches the aspect ratio of your camera; otherwise, the image may be cropped.

3. Check the Change background of the image box. You will immediately see the result in the preview window.

You can see how this feature works in our video: https://youtu.be/bSrTfzxp26E?t=1747 .
1.5.3. Network

In the Settings → Network → General section, you can change your TrueConf server or connect to TrueConf Online.

If Suppress direct connection checkbox (unmarked by default) is marked, point-to-point video calls will be routed through the server.

To check the list of servers available for connection, click View list.

In the Limits and Test sections, you will be able to configure network settings at a more advanced level.

1.5.4. Preferences

You can go to Settings → Preferences → General to configure the application autorun at the operating system startup (enabled by default).
The Sign in automatically checkbox (enabled by default) allows you to connect to the server without entering your login and password 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 change the server, go to the Settings → Network → General menu, specify the required one in the Connect to the server: section and press Connect. You don't need to disconnect from the current server using TrueConf → Sign out menu item, otherwise automatic authorization will not be available the next time you connect to this server.
2. Address book

Once you sign in, you will see the address book in the right part of the application window:

1. Contact management tool
2. Global user list
3. Dial pad
4. User search field
5. List of users and their statuses
6. Address book
7. Conference management tool
8. Chats
9. Call History.

2.1. Adding a new contact

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 him/her to an existing one:
2.2. How to find a user

Start entering the user's TrueConf ID in the search field above the address book. The application will filter the contact list according to the characters you entered to make it easier for you to find the right user.

2.3. How to delete a user

Find the user or device by their display name in the address book, open context menu and click Delete user.
2.4. How to block users

You can block any user; this option is available in the context menu.

You can only delete the contacts you have added to the address book manually.

You can cancel your actions in the same way.
When you block a user, they will not be able to:

- call you
- invite you to meetings
- send you personal messages in chat

The list of blocked users is displayed in the Settings → Black list section of the client application:

2.5. Viewing and editing users' personal information

To view the user's profile:

- Click on the user's name and press the button.
- Use right click to open the context menu and select User information.

The following options are available in the user's profile:

- view/edit the information about the user.
- call a user or send a personal message.
- delete or block the user.
2.6. Organizing your address book

2.6.1. Creating user groups
Click on the triangle button next to All users and select Create group from the drop-down menu. Enter the group name and select the users you would like to add. Then click Save at the bottom of the menu.

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's profile.
2.6.2. Setting up the address book view

Click on the triangle button next to All users and select the users you would like to be displayed in the address book. You can choose to display all users, online users, or group members only.

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

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

2.6.3. Editing or deleting groups

To delete or edit a group:

1. Open your address book and choose to display the list of all groups.

2. Select a group, open the context menu and click Edit group or Delete group:
2.7. Global user list

By clicking the icon at the top of the address book, you will be able to view the global user list, which includes contacts from the TrueConf Server instances federated via TrueConf Directory.

This button will become active once you configure the integration with TrueConf Directory.
3. Calls

3.1. How to call a phone
To call a user, double click on their name in the address book or use one of the methods described below.

3.1.1. From the search field
You can call a user from the search field. Simply enter the user’s TrueConf ID or name and click the call button.

3.1.2. From the context menu
You can make a call by selecting the Call option in the context menu for a user.

3.1.3. From the address book
Select a user and click the call button in the pop-up panel.
3.2. How to call a phone
You can call a phone number by using the dialer or the search field in the address book.

3.2.1. Calls from your address book search field
Enter a phone number in international format in the search bar. Next, click the call button in the menu that appears below. For example, dial +18338783263 to call our sales department.

You can also call extension numbers connected to your PBX.
For example, if a subscriber has an extension 910, enter the string in #tel:910 format in the search bar of your address book to make a call.
3.2.2. Calls via Dialers

You can call a phone number from TrueConf client applications for Windows, Linux, macOS or Android by using the dialer, next to which you can see a list of the users whose phone numbers were added to the server.

In TrueConf for Windows, users can access the dialer by clicking on the icon 📞 in the sidebar.

3.3. How to call SIP/H.323 and RTSP

To call external video conferencing endpoints or a server, enter a call string in the format corresponding to the addressee type. As when entering a usual username, a new darkened line will appear at the top, next to the filtered list of the address book contacts. You can interact with it in the same way as with others.
Supported device types and call examples:

- **SIP endpoints** (including tone dialing)
- **H.323 endpoints**
- **RTSP sources**.

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

To test DTMF signaling, you can use Public SIP URI of The Test Call website: #sip:thetestcall@getonsip.com. As DTMF keys are being sent, the robot reads out the digits you enter.
4. Conferences

4.1. Connecting to a conference

You can join a video conference by:

- calling its owner.
- connecting to the conference using its ID.
- choosing a conference and clicking Connect to conference in the conference scheduler.
- going to the conference page.
- accessing the conference page. You will need to know your conference ID and enter it on your TrueConf Server guest page.
- accessing the conference page from the personal area. This option is available only to the conference owner.
- entering the URL address of the conference page in the search field of your client application.

4.2. Creating a conference

In the panel below the address book, go to the Conference Manager section. In the Options tab enter a conference name and select its type.

When you connect to a meeting by calling its owner, he receives a corresponding request by default. You can change this behavior by clicking the Don't request confirmation for joining the conference checkbox. In this case, a user who wants to participate in the meeting will automatically connect to it when calling its owner.
After that, open the Participants tab. You'll see a list of all users in your address book. Select those you want to invite to your conference and click Create.

4.3. Scheduling a conference

By clicking on the calendar icon at the top of the Conference Manager section, navigate to your conference scheduler where you can:

- Schedule a conference on a specified date and create its settings
- Create a virtual room (a conference without schedule)
- Create a conference template.
We demonstrated how to schedule a conference in our video: https://youtu.be/e7iEg7m9qbU.

To create a conference in the scheduler, follow the 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 type selection may not be available, if the server administrator didn’t enable creating webinars.

3. Click Continue to proceed to the main settings.
4.3.1. "General" tab

In this section, you need to specify:

- Conference name.
- Conference type (Symmetric is selected by default).
- Number of active speakers if you chose a role-based conference.
- Once you sign in, you will see the address book in the right part of the application window.
- Date, time, duration, and, if necessary, recurrence for a scheduled conference.

If you need to create conferences with the same settings in a single click, select Save as a template checkbox.

4.3.2. "Participants" tab

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

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

4.3.3. "Layout" tab

In the Layout tab, you can select either a default layout for all participants or an individual layout for every single participant.

- Editing layouts is not available for asymmetric video conference (video lecture).

To configure the layout, complete the following steps:

1. Select a video layout.
2. Choose the number of video windows.
3. If necessary, you can add an additional window for content sharing.
4. Select the participant for every video window or click Auto-fill layout (you will be able to re-arrange video windows with a mouse). For convenience you can also switch to full-screen mode.
5. Select the location of a participant's name (at the top or at the bottom of the video window).
6. If needed, you can mark Do not allow users to change the layout checkbox.

4.3.4. "Advanced" tab

In the Additional tab, you can:

- Enable uninvited users to join the conference without asking for permission (available only for private conferences)
- Enter the conference ID and specify guest permissions
- Allow conference recording
- Send email invitations to conference participants.

4.4. Creating a conference from a call

You may need to invite additional users to your video call.

TrueConf for Windows client application allows you to transform your video call into a video conference
by connecting other participants to a conversation. There is no need to interrupt a call and start a new video conference.

To add a new participant to a conversation:

1. Proceed to the Address book section in the panel at the bottom of the app.
2. Choose a participant, you want to connect to a call and call them in one of the ways described in the previous section of this guide.

You can also connect an IP camera, using call strings.

4.5. How to invite a group to a meeting

To create a conference with a user group, 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 moderator.
5. During a video conference

5.1. Changing video layouts

You can adjust your video layout during a TrueConf meeting by changing the order of video windows on the screen.

To adjust your view, go to the Conference Manager → Tools tab and open the Video window layout section. Here you can select one of the available video layouts.

If you select the Speaker View mode, Switch to Active Speaker checkbox will become available. Check this option if you want to focus on a current presenter: the speaker’s pane will automatically become bigger.

5.1.1. Can I customize the video layout during the meeting?

Yes, you can.

* If a TrueConf app user changes their 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 left-click on the pane you would like to make bigger.
2. Other windows will be displayed as thumbnails. Double-click again on the larger window to return the video layout to its original position.

* Adjusting priority windows is also simple. Drag-and-drop or double click the pane to change its place.

You can see how these features work in our video: https://youtu.be/F1Jp8RtdLdY.

### 5.1.2. How to lock a video layout for other meeting participants

If you are the conference owner or have operator rights, go to the Video window layout section and click **Proceed**.

The Real Time Meeting Manager window opens. Here you can configure video layouts as shown in the personal area description of the TrueConf Server user manual.

* Conference moderators who do not have operator rights cannot change the video layout for other participants.

The Real Time Meeting Manager window opens. Here you can configure video layouts as shown in the personal area description of the TrueConf Server user manual.

* In the same window, you can view detailed information about the meeting by clicking the button in the top left corner.

### 5.1.3. Can meeting participants decline the locked video layout?

Yes, they can if the meeting owner selects **Enable users to change layout** in the Real Time Meeting Manager.
In this case, the meeting participants will be notified that the customized video layout is available and will be offered to change their view:

Even if the moderator’s layout has been declined, a participant can still enable it. To do it, go to the Conference Manager → Tools tab and open the Video window layout section:

5.2. Managing and changing participants' audio and video devices

During a meeting, owners or moderators can not only enable/disable participants’ cameras and mute/unmute microphones, but also select an appropriate one from the list of available devices and adjust microphone sensitivity.

To do it, open the Real Time Meeting Manager and follow the steps described in the TrueConf Server user guide.

We demonstrated the Real Time Meeting Manager features in our short video:
5.3. TrueConf virtual meetings overview

5.3.1. How to make an audio remark
With the help of audio remarks (also known as push-to-talk), attendees can express their opinion during the virtual meeting without becoming a presenter. To make an audio remark, press and hold the Make an audio remark button in the Conference Manager → Tools tab. Upon pressing the button, your remark will be broadcasted to the meeting for another three seconds (see countdown displayed on the button).

5.3.2. How to take and leave the podium
In a virtual meeting, any attendee can become a presenter. If you want to become a presenter, press the Take podium button which is located in the same menu as the Make an audio remark button. Your request will be processed by the meeting moderator.
To change your role to an attendee, click the Leave Podium button that will be displayed instead of the Take podium button.

5.3.3. Granting and changing meeting roles

After an attendee sends a request to become a presenter, the meeting moderator will receive the following notification:

The moderator can also invite meeting attendees to become presenters; to do it, select the user in the list of meeting participants and press the corresponding button.
The participant will be invited to become a presenter:

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.

5.4. Reactions and Polling
TrueConf for Windows allows conference participants to take and participate in polls using small reaction or status icons:

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 an audio reply.

During a conference, click the Conference Manager tab in the right panel of the app. In the Participants click Reactions and select a corresponding reaction icon. Optionally, your reaction can be changed (simply by selecting a different icon) or canceled (by clicking the button below).
Next to the list of possible reactions, you can see the **Reacted** counter that displays the number of participants who have already reacted or taken poll.

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.

A **host** may cancel all reactions made by other participants. To do it, simply click **Clear all reactions** when you select your own reaction.
6. Collaboration tools

6.1. Live 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 text message.

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

6.1.1. Sending files via live chat

To send a file simply drag and drop it to the chat panel. Alternatively, you can click on the paperclip icon on the left side of the input field.

Click to select a file (it will be sent to chat immediately without prior confirmation).

If users are not currently online, you can send them an offline message, they will get it immediately after logging in.

The default location of downloaded files is:
- C:\Users\User_Name\Downloads for Windows
- /home/User_Name/Downloads for Linux
- /Users/User_Name/Downloads for MacOS.

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

6.2. Conference recording
If other participants allow, you can record your conferences.

6.2.1. How to record video conferences
Open the application, proceed to Conference Manager → Tools tab in the right bottom corner and click Recording. In the Recording source field, select the conference participant you would like to record (everybody, only your own video or one of participants) and click .
Each recorded conference participant will see the icon 📹 in the upper left corner of their video window.

Если вы записываете видеозвонок или конференцию с помощью клиентского приложения и хотите, чтобы в запись попадал демонстрируемый экран или документ, то используйте функцию “Показ контента”. Начните демонстрацию окна приложения с требуемой презентацией или документом, либо всего рабочего стола. Передаваемое изображение сразу начнёт попадать в запись вместо картинки с вашей веб-камеры. Не выносите показ контента в отдельное окно – в этом случае он перестанет записываться.

6.2.2. How to configure permissions for conference recording

Each participant can configure permissions for conference recording individually (to do it, proceed to Settings → Preferences → Other, 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:

  ![Permission Request](image)

  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.

### 6.2.3. How to find conference recordings

By default, video conference recordings are saved in the .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 → Other.**
6.2.4. How to watch conference recordings

You can watch recorded conferences on your PC using any video player (such as VLC) that supports VP8 codec.

6.3. Slideshow

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

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

TrueConf for Android and iOS users are able to use the content sharing feature.

6.3.1. Supported formats

We support popular presentation formats like **ppt**, **pptx**, **vpl**.

You can also create a slideshow from separate pictures directly in the program menu or even add pictures to the list of the slides imported from the presentation file. The following image formats are supported: **jpeg**, **bmp**, **gif**, **png**, **tif**, **emf**, **wmf**, **ico** and **jfif**.
6.3.2. How to show slides

During a conference go to the conference management menu (button in the right bottom corner of the panel) and select Slide Show. Select the files and click the start button in the bottom.

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.

Передаваемые с помощью данного инструмента слайды не попадают в запись конференции, создаваемую с помощью клиентского приложения. Для записи демонстрируемого контента используйте инструмент “Показ контента”.

All other slideshow control elements are listed below.
1. Slide export and import menu.
2. Slideshow description.
3. Number of slides and current slide number.
4. Slide visible to conference participants if the presentation has been started.
5. Slide selected for preview (see also Item 10).
6. Move presentation control menu to another window.
7. Add files to the list.
8. Remove files from the list.
9. Move files up and down on the list (you can drag files to change their order).
10. Selected slide preview (see also Item 5).
11. Image name and size (displayed when the mouse cursor is moved over preview area).
12. Preview and slide switch control panel.

6.3.3. How to upload and save a slideshow
Add slides to the list as described above and open the menu in the upper part of the window (see No 1 in the previous section). Save the list to the file that you will open when necessary.

6.4. Content sharing
During conferences, you can share your screen or separate windows using TrueConf client application. Your content will be visible to all conference participants connected via TrueConf client applications and browsers (using WebRTC technology). Besides, the content shared during the conference can also be recorded for future reference.
Only maximized windows are correctly displayed during content sharing. Minimized windows will not be shared.

Start the conference and select the fourth icon in the conference toolbar.

Select the screen or application you wish to share in the drop-down list.

After that the application window will be minimized and the **Screen sharing** control panel will appear in the right bottom corner of the screen. This window will be displayed on top of all windows during the whole sharing period. Other conference participants will see your self-view video instead.
Here:

- stop content sharing.
- start sharing a different window.
- turn video on/off. After clicking this button you will see a small self-view video in the Screen sharing window (other conference participants will also see it in the corner of your video window).
- change your video display. It can either be displayed over the content or in a separate window.

Click this button and choose Show my video in a separate window. You will be able to share your content as slideshow with other conference participants. In this case your content can be shared with hardware video conferencing endpoints (via BFCP/H.239 protocols) if you acquired SIP/H.323 gateway for your TrueConf Server.

### 6.4.1. Simultaneous content sharing

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 a secondary monitor so that they don't miss a single detail.
6.5. Remote desktop control

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

In order to do this, click on the mouse icon in the upper right corner of the participant's 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.

6.5.1. Configure 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 → Conference and choose a corresponding option in the Who can access my desktop and applications 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:

![Notification](image)

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

![Notification](image)
6.5.2. Can multiple meeting participants take control over your desktop simultaneously

Several meeting participants may request access to your remote desktop. In this case, an icon which displays the number of requests received will appear in the upper right corner of the content window. Click on this icon to grant access to one or several participants, or deny requests:

6.6. PTZ camera control

During conferences, you can rotate and zoom users' PTZ cameras (including remote endpoint cameras).

ℹ️ You can control conference participants' PTZ cameras only if you are a conference moderator.

6.6.1. How to manage access to my camera

By default, control of a user's PTZ camera 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 the camera.
In client application settings, you can disable this function. 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 → Video and audio → PTZ camera control, choose one of three options under Who can control my PTZ camera heading: Ask me each time, Everyone or Nobody.

### 6.6.2. How to control other users’ cameras

To get started, right-click on a user’s video window and select Show Camera Control.
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.

Once you’ve been granted access, the camera control panel appears in the corner of the video window.

When you close the panel, it’ll be replaced with a small crossed arrows icon, upon clicking on which you can return the window.
6.6.3. How to control my own PTZ camera

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