



FAQ - BigBlueButton

deutsche Version

Which browser works best with BBB?

Since Google Chrome browser offers the best support for BBB on all operating systems (except Apple iOS), we recommend using Chrome or another Chromium-based web browser for BBB conferences.

Why is it not recommended to use Firefox?

BBB is based on WebRTC. There are a few issues with the implementation in firefox which can negatively affect the quality of the conference:

- The volume of the microphone is not automatically regulated. Therefore, the audio transmission of individual participants can be either too loud or too quiet.
- Webcam images and audio transmission may not be in sync.
- Firefox always uses the default output device (speakers) of the operating system. It is not possible to manually set the output device.
- Images of presentations may lag.
- The quality of transmission is reduced when sharing your screen.

What internet connection do I need for using BBB?

Real-time audio and video transmissions place significantly higher demands on network connections than regular websites. Therefore, it is recommended to use a wired network connection instead of WiFi, if possible. You can test the speed of your network connection at <https://speedtest.rz.tu-clausthal.de/>. For a stable connection, you need to have the following minimum results:

- Download > 10 Mbps
- Upload > 2 Mbps
- Ping < 100 ms
- Jitter < 20 ms

Which webcam do you recommend?

Current laptops are usually equipped with good webcams. However, when using a PC or external

monitor, then a separate webcam is needed. The computing centre recommends the following Logitech webcams for individual work stations: model „Brio 500“ and model „Brio Ultra-HD Pro“ for advanced users. For an optimal setup, please install the associated software [Logi Tune](#).

Note that webcams for individual work stations are not sufficient for the use in meeting rooms. Please contact the computing centre for advice on how to best equip your meeting room with video conferencing technology.


Can I upload my own virtual background?

From version 2.6 of BBB, you can upload your own images to be used as a virtual background. This can be done by clicking on the white check mark next to the camera icon, scrolling to the right under the „Virtual background settings“ section and then selecting „Upload from device“. Uploaded images are stored in your web browser's local storage and are available for future use when using the same PC.

I would like to record my meeting/event.


At present, it is not possible to record meetings or events on the BBB server at TU Clausthal. To record a lecture in a lecture hall, please use the Opencast system. To create your own lecture video using screen recording on a PC, the computing centre offers a license for Camtasia. See [Camtasia](#) for more information.

BBB does not initially display a slide.


When we switched to BBB version 2.4, we decided to hide the start-up slide. This is because most participants are already familiar with BBB. By clicking the presentation button , individual participants can view the start-up slide, if needed.

The start-up slide appears automatically for all participants when the presenter changes slides or zooms.

How can I change the layout of the BBB interface?

BBB version 2.4 introduced a choice of layouts. The default layout is the „Smart layout“ which automatically arranges the layout of the webcam images and presentation. Via the settings menu icon , you can switch to „Custom layout“. This layout lets you adjust the size and position of each section in the browser window.

When sharing my screen, the size of my webcam image is reduced.

Shared images are shown to the presenter in reduced size to avoid video loops and their resulting high data usage. If needed, they can be expanded to full size via the full screen icon  at the top right of the image.

How many rooms can I create in BBB?

Via [Webconf](#), each user can create as many rooms as they wish.

I am organising a larger event. How many participants can partake in BBB?

Based on our own experience and those from other universities, we expect meetings with one to three presenters and approximately 500 listeners to be possible without any problems. It is further possible to have meetings with more than 50 participants who all use video. As the number of participants increases, the webcam resolution, refresh rate, and data rate are automatically reduced. This prevents overloading end devices. Once the number of participants reaches 16*, BBB changes to a page-by-page display (*32 for moderators).

Is it possible to get an exclusive server for a BBB event?

When we started using BBB in 2020, it was not always very reliable and efficient. In addition, there was little experience with hosting larger events. Because of that, we had exclusive servers for important BBB events in a so-called VIP environment. Since then, BBB has significantly improved. In March 2022, we consolidated and unified the BBB server environment. We now have 12 equally strong BBB nodes across which all sessions are automatically distributed. Based on our utilization measurements over several months, we consider this environment to be sufficiently stable and efficient so that exclusive BBB servers are no longer needed.

I would like to upload a presentation but I keep getting an error message.

If possible, please upload files using PDF format. PDF files should be a maximum of 200 pages long, have a maximum size of up to 30 MB, and their conversion should take a maximum of five minutes. If necessary, please split your files into several parts and upload them one by one.

The presentation I uploaded looks different - fonts are incorrect and image errors are displayed.

When uploading MS Office files such as Word or PowerPoint, BBB automatically converts these files to

PDF format using LibreOffice. Because of this, it is possible that fonts, symbols, drawings, and formatting are affected. Animations are typically not supported. Please convert any files to PDF format using the programme in which they were created, and check your results prior to uploading. If content or animations are missing, you can use screen sharing for the presentation instead.

The voice quality varies greatly - sometimes individual participants cannot be understood at all.

The sound quality heavily depends on the quality of microphone being used. If several participants speak at the same time, it becomes incomprehensible. Therefore, we recommend to turn microphones off when not speaking. Background noises may also cause disruptions. As participants often do not notice these themselves, please inform them discreetly. In addition, it is recommended to use Google Chrome as it has shown to produce a more balanced volume.

I keep experiencing dropouts in audio and video.

Real time audio and video transmissions place a significantly higher demand on the quality of network connections and performance of end devices than regular websites. This means that audio and video dropouts are typically the result of an unstable network connection or an overloaded PC, so please check your CPU utilization and your network connection. It is recommended to use a wired network connection instead of WiFi, if possible. You can test the speed of your network connection at <https://speedtest.rz.tu-clausthal.de/>.

Is the transmission quality worse when using VPN?

The transmission quality was reportedly worse when using VPN. Therefore, it was initially recommended to disconnect all VPN connections before joining a BBB conference. However, the optimization of the VPN Server on July 15, 2022, eliminated this problem. This means that VPN can now be used for all video conferences.

I cannot enable the microphone or camera as described in the instructions.

In order to enable audio and video transmissions on your PC, you must first activate the webcam and microphone via the Windows Control Panel. Then you have to grant your browser permission to access them. If you have accidentally turned off permission, then you must first undo this as described in the instructions.

Firefox does not detect any output device (speakers).

Firefox cannot automatically detect and switch output devices. It uses the default device of the

operating system. If the output device of the operating system is correctly set up, then the audio output will work regardless of Firefox claiming that no device was found. However, we recommend using Google Chrome instead of Firefox.

BBB uses a different audio device than intended.

You can change audio devices by clicking the white check mark next to the microphone icon. It is also possible to set default audio devices in Windows by right-clicking the speaker icon on the taskbar and then opening the sound settings. The browser should then automatically use your default devices.

Note that your default devices may be unintentionally changed due to the sequence in which they are switched on, reconnecting devices or driver updates. Therefore, we recommend to disable any unwanted devices in Windows via "manage audio devices".

It is difficult and confusing to react to feedback during a lecture.

During a lecture, it is recommended to have an assistant who can observe chat messages and take care of participants.

How do I use BBB in my courses? Or how do I invite the students to my BBB room?

BBB is integrated into Stud.IP and Moodle via plugins. Please use either LMS to create and configure a BBB room for your course. See [Plugin für Stud.IP zu Einbindung von BigBlueButton](#) and [Plugin für Moodle zur Einbindung von BigBlueButton](#) for further instructions.

How can I use BBB in lecture halls and seminar rooms?

In large lecture halls at TU Clausthal, provisions have been made to transfer lectures from a PC to BBB. Audio transmissions from the audience are only possible to a limited extent. See [BigBlueButton im Hörsaal](#) for more information.

Seminar rooms often do not supply fixed audio equipment. To use BBB in seminar rooms, you can hire audio equipment from the equipment loan service in the computing centre. Again, audio transmissions from the audience are only possible to a limited extent and questions may have to be repeated by the speaker.

Some rooms, such as the Senate Meeting Room (A1-177) and the seminar room in the computing centre (B5-119), are equipped with microphones which allow audio transmissions without restrictions.

How can I transfer images from a visualizer?

If a PC has multiple video sources, such as a webcam and a visualizer, then it is possible for BBB to transmit two video images at the same time. From BBB version 2.7, the function „Camera as content“ can be used to display the visualizer image instead of the presentation with a resolution of 1920×1080 at 30 frames/s. Unfortunately, this means that data will be compressed which leads to a loss of quality. Therefore, the display of detail is limited.

In breakout rooms, students should use more than one slide to jointly create a presentation.

In breakout rooms, BBB provides only one page on the whiteboard. It is therefore recommended that students create presentations using several blank pages and uploading them to the breakout room.

From BBB version 2.6, it is possible to transfer the results from breakout rooms to the main room via PDF files. This option must be selected when creating breakout rooms. The PDF files are then available to the presenter via the plus button once the breakout rooms close.

The playback of videos from the TU Clausthal video server does not work.

Unfortunately, the playback of videos from the TU Clausthal video server via the “external video” function in BBB is currently not supported. An exception are videos which are uploaded with an additional option: [Einbinden eines Videos vom Video-Server in BigBlueButton](#)

In a meeting with external partners, some cannot join the BBB room.

Some companies and countries (for example, China) have sealed themselves off with firewalls in such a way that it is not possible to establish a connection to the BBB server at TU Clausthal. The website then still loads but audio and video connections fail. You can ask your external partner if they can set up a meeting room on their video conference platform, or else, you can contact the RZ support team for an alternative.

How can I switch BBB to English?

BBB is, by default, displayed in the same language as your browser. You can change the language via “settings” in the main menu of BBB.

The answer to my question is not listed above.

If your web browser or connected device malfunctions, then restarting your browser or PC often helps.

If you use a browser other than Google Chrome, you can check if using Google Chrome solves the problem. If you are experiencing any other problems, please contact the RZ support team for help and indicate which operating system and web browser you are using as well as the time and URL of the meeting. In case audio and video transmission problems, please add your connection status from BBB and the results from <https://speedtest.rz.tu-clausthal.de/>.

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Direkt-Link:

https://doku.tu-clausthal.de/doku.php?id=multimedia:web_conferences_with_bigbluebutton:faq_about_bigbluebutton&rev=1697015641

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