



Remote Speaker

Integrate speakers from anywhere in the world into your livestream.

Until recently, during a live-streamed event, the complete presentation content was produced live-online. For this purpose, the audiovisual signal of the speakers and their presentations was captured on site, together with the desired functionalities (access options, interaction possibilities, etc.) and the whole ensemble published as a webcast project on the Internet.

Contemporary challenge is to organize the entire production process without the actual physical presence of one or more speakers. Speech should be recorded in advance or live in the studio. In both cases, the speaker is often not on site, but rather "in a remote location", such as his office or home office - anywhere in the world.

So called Studio is created by combining space, personnel and the technical setup, as agreed with the customer, in any location or directly at the audiovisual service provider. Regardless of the spatial requirements, when choosing the location, it is imperative to ensure an adequate and stable Internet connection.

Below, we would like to show some possibilities of how to connect these "remote speakers" with your local studio via a video call or other web meeting solution and integrate them and their presentation into a live stream that can be published as an interactive and multifunctional webcast.



„Remote Speaker“ and his presentation as an input signal into the encoder or video switcher.



Technical solutions available for the transmission of the speaker signals

There are different ways to establish an audio/video connection with an offsite speaker. Viewing the nature of the project and the event schedule, it quickly becomes obvious which solution or a mixture of solutions is the most viable to use for the respective webinar or webcast project.

What does your Event Schedule look like:

- How many speakers are planned?
- Will there be presentations shown?
- Do you need to connect together several speakers/moderators?
- Are there web meeting solutions in place that have already been used and are thus familiar?

In the following scenarios, we assume that the individual signals have been captured, passed through a video switcher/encoder, then either encoded and streamed directly or passed on to a broadcast console as an input signal.

For the signal generation, we recommend the NDI or signal capture/display functionality of the respective tools.

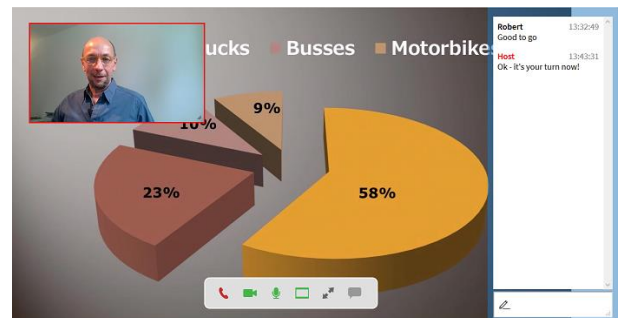
a. Video Call

The advantage of this method is that up to 5 audio/video signals can be captured, mixed and output as a livestream, or a signal to the video switcher with just one system. The incoming video signal to the studio is clean (no watermark) and the transmission quality can be adjusted or optimized depending on the available Internet connection.

The "Remote Speaker" receives a link and opens it in the browser. The whole setup for the transmission of the audio/video signal is very straightforward, especially for the speaker.

The return path can be individually configured and should show the published livestream signal to the speaker.

Communication (studio - speaker) can take place via the audio channel of the video call or a simple chat function integrated in the video call.



We recommend the following backup solution:

- "Remote Speaker" creates a selfie.
- Studio provides a telephone connection and, as an alternative to video, supplies the speaker's audio signal with his picture.



b. "Publishing" and "Online Navigation" of a presentation

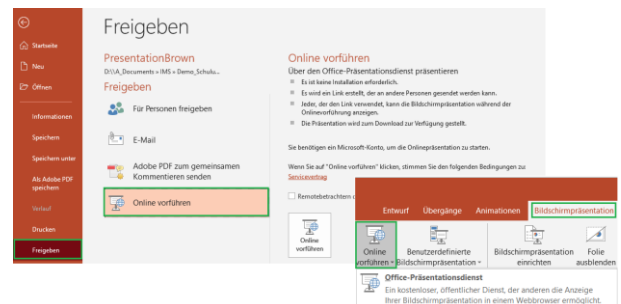
The most common scenario we encounter, consists of a mixture of simple video calls (one or more speakers) and video calls including presentations.

Following description shows the possibility of synchronizing the presentation with the video signal and making it available in the studio with the help of a "publish" function.

The advantage of this procedure comprises relatively simple handling and the low utilization of the available Internet bandwidth. The audio/video signal and the presentation can thus be routed to the broadcast console and streamed live in the best possible quality.

The procedure for the "Remote Speaker" is as follows:

- Your presentation program needs a "publish" or "release" function to work. Microsoft does support "publish" and "navigate online" from PowerPoint 2013 onwards. You will also need a Microsoft account.
- Ideally, create your presentation in a 16:9 aspect ratio - this corresponds to the usual video format and thus allows optimal presentation in the output window.
- "Publish" the presentation with the "Share" function. You will receive a protected link. Send this link to the studio.
- The studio can call up this link and thus your entire presentation in optimal quality directly in the broadcast console.
- The "Remote Speaker" controls the presentation from his workplace. All control commands are transmitted 1:1 and displayed in the broadcast console.
- Here you will find an example with [detailed instructions](#) on how to "publish" and "navigate online" PowerPoint presentations.



We recommend the following backup solution:

- Before the event, the "Remote Speaker" sends the studio updated version of the presentation.

This also allows the studio to display and control the presentation according to the speaker's instructions (next slide please, etc.). However; this type of control limits the navigation to "page by page", i.e. control over individual headings, graphics or effects is lost.

- Videos included in the presentation should also be sent as separate files.
- The speaker is able to see the currently displayed slide in the return path of the video call as a background image



c. Web meeting solutions

This provides the possibility to populate the foreground of the speaker screen with further content (windows, browser, presentations, etc.). However; the connection is limited to one speaker per system.

The transmitted signal is usually not clean, but a watermark is often displayed (e.g. Skype) or other functions embedded in the image (microphone, speaker name, etc.).

The "Remote Speaker" must install a specified app in order to establish a connection with the studio.

It is certainly of advantage to utilize web meeting systems that have already been used and the customer is familiar with them.

We recommend the following backup solution:

- Video call, and "publication" and "online control" of a presentation, see point [a.](#) and [b.](#)

d. Conclusion

Which signal path is the most suitable can be determined after reviewing the Event Schedule and the respective customer preference.

As a rule, any encoder software or broadcast console can access all individual signals (audio/video, screen/presentation) in all of the described scenarios. There may be differences as far as flexibility in the individual routing.

The video is usually published as a part of a comprehensive webcast project, designed and furnished with additional functionalities. Nevertheless, one should keep in mind how will the video look like in a standalone mode, e.g. full screen view. If necessary, a suitably designed template, including logo, topic, speaker information, etc., can serve as a useful background.

We are happy to answer any further questions you may have.

Your IMS Webcast Team