

Prevail Blue Comparing free webinar options (please advise us of errors or omissions – prevailblue@gmail.com)

Provider	Free service plan offered	Attendee limit on free plan	Free length limit	Record on free plan	Integrated White-board	Screen Sharing	Tech Support on free plan	1 st level paid \$ per mo ⁽¹⁾	Access method
DUO (Google)	Yes	10	No limit	No	No ⁽¹¹⁾	No ⁽¹¹⁾	Online manual	\$3/user	Browser, mobile app
ExplainEverything	Yes	8 ⁽⁵⁾	No limit	1 min	Yes	Yes	Email	\$7	Browser, mobile app
Facebook ⁽¹³⁾ Messenger Rooms	Yes	50 ⁽¹⁴⁾	No limit	No	No	No	No	n/a	Facebook Messenger
FreeConference	Yes	5 ⁽⁸⁾	12 hrs	No	Yes	Yes	Chat, forum, web form	\$25 ⁽⁹⁾	Browser, PC/Mac app, mobile app
Freeconferencecall	Yes	1,000	6 hrs	1GB cloud storage	No	Yes	Email, chat, phone, live	A la carte ⁽¹⁾	Browser, PC/Mac app, mobile app
Google Meet ⁽⁴⁾ (was Hangouts)	Yes	100 250 (9/20)	60 min, 24hr (9/20)	Until 9/2020	No	Yes	Web form	\$6/user	Browser, mobile app
GoToMeeting	Yes	3	40 min	No	No	Yes	Online manual	\$12	Browser, PC/Mac app, mobile app
Houseparty	Yes	8	No limit	No	No	No	No	n/a	Mac/Chrome app, mobile app
Microsoft Teams ⁽²⁾	Yes	No limit	No limit	No	No ⁽¹²⁾	Yes	No support	\$5/user	Browser, PC/Mac app, mobile app
Qiqochat	Partially ⁽⁶⁾	No limit	No limit	Built on Zoom	Yes	Yes	Phone	1c per user per minute	Browser
Skype Consumer ⁽²⁾	Yes	25	No limit	Storage terms unclear	Yes	Yes	Web form	\$2 per user ⁽³⁾	Browser, PC/Mac app, mobile app
Webex	Yes	50	40 min	1GB cloud storage	Yes	Yes	Email, chat, phone	\$13.50	Browser, mobile app
Webwhiteboard	Yes	No limit	21 days ⁽⁷⁾	n/a	Yes	Yes	No	\$8	Browser
Zoom ⁽¹⁰⁾	Yes	100	40 min	Local on PC	Yes	Yes	Email	\$15	Browser, PC/Mac app, mobile app

* This is the first level charge to add new features.

1 Features can be added a la carte for varying fees.

2 The free system is a peer system, no administrative functions.

3 Pricing and features are complicated with several limitation dependencies.
<https://bit.ly/2QSgzPX>

4 Google Hangouts was retired, April 2020. Most accounts were migrated. The paid version integrates most Google apps. Several features have promotional value-adds until September 2020.
<https://gsuiteupdates.googleblog.com/2019/01/upcoming-hangouts-service-consolidation.html>.

5 ExplainEverything recommends a maximum of eight users per sharing session. Computer audio can be shared. You are allowed three projects, presenting one slide in each. You can record 1 minute of voiceover for each project. The vendor recommends to show the white board through a 3rd party product such as Zoom or to page back and forth between the whiteboard and the webinar. You can upload whiteboard templates, or use ones in the library. Presenters are recommended to use two PCs.

6 Qiqochat is likely the richest system in development for online activist collaboration. At 1c per minute per user for the audio/video integration, *it can get expensive*. The system is complex, and involves an intricate functional hierarchy and vocabulary. Group/whiteboard participants must manually start and stop multiple Zoom sessions. You can't control attendance limits in breakout sessions.

7 Whiteboards are accessible at a URL and are stored for 21 days. Paid plans add security access controls. To use with a webinar, have attendees launch the whiteboard at the start of a presentation then page back and forth between the whiteboard and the presentation. There is no limit to the number of whiteboards you can create. You can upload your own whiteboard templates.

8 The free account is limited to five online web users, and 1000 audio only.

9 The first tier is not worth paying for, not enough online users allowed. \$25 is the second tier.

10 Dialup audio not included in free plan, computer audio only.

11 Not listed on the site, probably via 3rd party and other Google suite integration

12 Collaboration in Teams is done using Microsoft Office apps and Office 365 apps.

13 Sessions are not encrypted end-to-end.

14 By default, any of your Facebook friends will see that you have a session running, and can join. This can be changed. Also, non-Facebook users can be invited.

More reviews of web white boards: <https://zapier.com/blog/best-online-whiteboard/>

More reviews of webinar systems: <https://video4work.com/>

Not included in the table:

Amazon Chime provides a free plan but it does not appear that free users can be meeting Admins. Dial costs extra. Regular users are charged on a pay per use bases.

Bluejeans is a comprehensive business solution. There is no free plan. Actually their 150-attendee paid plan at \$9.99 could be compared to Zoom Pro (\$15/month). Among several tested apps, it was noted that Bluejeans persists in active memory even when not in use.

Mural.co is an extensive whiteboard collaboration system. 30 day trial, but no free plan.

Danware NetOp, TeamViewer and similar products are help desk systems, generally not used for, nor intended for group meetings.

Security and Privacy Considerations for Webinar Systems

All shared conferencing systems mentioned here provide encryption between servers and end users. Authentication steps of varying strength can be required for entry into meetings, or waived. To avoid unauthorized attendees, extra security steps are always recommended. In general, you should assign a meeting password, and if available, a second authentication factor.

FREECONFERENCE

Meeting moderators can choose to be notified by text anytime someone connects to their account, if they are not present on the call.

We recommend: do not allow a call to start without the host being present.

<https://www.freeconference.com/fag/secure-conference-call-service/>

FREECONFERENCECALL

Meeting attendee names, emails and phone numbers are recorded as part of the call logs shown to the host. The call host can choose to hide the attendee list details during the meeting, although attendees of course will have visible names associated with their pictures if they choose to activate video.

We recommend: Use as a Zoom *alternative* because it's not as well known.

Do not allow a call to start without the host being present.

HOUSEPARTY

It is billed purely as a casual social networking platform and is targeted at small groups of phone users. There are some included online group games. Invites can be sent to your phone contacts list, and by SMS. Various articles have published ways to crash meetings. The terms of service suggest that the company may monitor meetings to look for content that

violates their terms of service. Various articles warn of user privacy issues including password and account harvesting. App reviews on Google Play claim that Houseparty uses a lot of data and makes phones run hot.

We recommend: Use other services. Lock the meeting when the expected people have joined.

<https://www.express.co.uk/life-style/science-technology/1262472/Houseparty-Warning-Video-Chat-iPhone-Android-Dangerous-Flaw-Login-Data>

<https://www.express.co.uk/life-style/science-technology/1262739/Houseparty-Safe-Delete-Phone-App-Hack-Warning-Netflix-Spotify-Password>

WEBEX

In Q4 2019 a [vulnerability](#) was discovered in Webex that allows hackers to find and enter private meetings by querying servers. The Cisco Product Security Incident Response Team (PSIRT) published an informational security advisory with instructions to mitigate the vulnerability.

We recommend: assign a password to every meeting.

ZOOM

For any meeting that has occurred or is in-process, Zoom allows administrators to see the operating system, IP address, location data, and device information of each participant. This device information includes the type of machine (PC/Mac/Linux/mobile/etc), specs on the make/model of your peripheral audiovisual devices like cameras or speakers, and names for those devices (for example, the user-configurable names given to AirPods). Administrators also have the ability to join any call at any time on their organization's instance of Zoom, without in-the-moment consent or warning for the attendees of the call. In Q4 2019 a [vulnerability](#) was discovered in Zoom that allows hackers to find and enter private meetings by querying servers. Additional variations on this exploit occurred in 2020. Note that countries, corporations, and school districts are placing restrictions and bans on its use. Links to source articles can be found below.

We recommend: assign a password to every meeting, and implement waiting rooms.

As of May 2020

- Zoom user sessions are encrypted end-to-end.
- Zoom requires a meeting password or a waiting room for all events.

Historical references to incidents involving invasion of Zoom meetings:

<https://www.eff.org/deeplinks/2020/03/what-you-should-know-about-online-tools-during-covid-19-crisis>

<https://support.zoom.us/hc/en-us/articles/115000538083-Attendee-attention-tracking>

<https://www.theverge.com/2020/4/1/21202584/zoom-security-privacy-issues-video-conferencing-software-coronavirus-demand-response>

<https://www.zdnet.com/article/how-to-prevent-your-zoom-meetings-being-zoom-bombed-gate-crashed-by-trolls/?fbclid=IwAR2L8qvXmWfOBHEy0djDQj-6q1GNNff36olZvdk3b99VQ7ab06OjWjf3HBo>

<https://www.theguardian.com/world/2020/apr/11/singapore-bans-teachers-using-zoom-after-hackers-post-obscene-images-on-screens>

<https://www.sfchronicle.com/local-politics/article/Cybersecurity-breaches-leave-Oakland-and-Berkeley-15188263.php>

<https://www.reuters.com/article/us-zoom-video-commn-privacy/zoom-hires-former-facebook-security-chief-as-google-bans-desktop-app-idUSKBN21Q1TY>

<https://www.techrepublic.com/article/who-has-banned-zoom-google-nasa-and-more/>