



Presenter Connectivity FAQ

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This document provides an overview of the network requirements for using Studio as a presenter and outlines the technology the platform uses to support real-time communications. Note that real-time communication is not required for attendees. [Click here](#) more information about attendee access.

What are the network requirements for using Studio as a presenter?

Studio requires that UDP communication be allowed to the IP addresses noted below. You can determine if your network meets these requirements by using the [Studio System Test](#).

How does Studio use UDP communication?

Studio uses UDP to enable a presenter's browser to connect to the servers in the West data center. This enables speakers to receive low-latency video and audio essential for creating engaging, interactive broadcasts.

Do these requirements apply to all presenters?

UDP communication is required for any presenter that will be broadcasting audio or video or pushing slides during a presentation. If a presenter/moderator will be managing the question queue and responding to questions, they do not need UDP communication, and their experience is served up like a standard web page.

What are TCP and UDP?

There are two protocols used for communication on the Internet. TCP (transmission control protocol) is the far more common. It is used for standard web pages. TCP provides error-checking to ensure successful transmission of data, which creates latency. UDP (user datagram protocol) is designed for applications where speed is the most important. UDP eschews error checking in favor of low latency communication. It is the preferred protocol for live broadcasting and online games.

If UDP doesn't have error checking, what happens to a stream if errors occur?

If a transmission error occurs during a broadcast, the user may see a brief distortion in the video feed or hear distortion in the audio. These problems only impact an individual user. Note that in many cases, errors are corrected rather quickly and may not be noticed by the user. To help mitigate this behavior, Studio, along with browser makers, implement a technology called Forward Error Correction (FEC), which makes streams more resilient.

Why do some organizations not allow UDP traffic?

Many organizations have their firewalls configured so that any unexpected traffic is blocked. Because of this, organizations must configure their firewall to support Studio.

Is it difficult to configure a firewall to support Studio?

No. We've worked with multiple organizations to enable connectivity and the process is simple. It involves opening a range of ports to onlinexperiences.com, as noted in the table below.

Hostnames	UDP STUN Port	UDP Traffic Ports	TCP Tunneling Port
ing01.onlinexperiences.com	3478	49152-65535	80, 443
ing03.onlinexperiences.com	3478	49152-65535	80, 443
ing04.onlinexperiences.com	3478	49152-65535	80, 443
ing05.onlinexperiences.com	3478	49152-65535	80, 443
ing06.onlinexperiences.com	3478	49152-65535	80, 443
ing07.onlinexperiences.com	3478	49152-65535	80, 443

Optimally a firewall request to open **UDP** ports 3478, 49152-65535 and **TCP** ports 80 & 443 to *.onlinexperiences.com is best. This allows Only use explicit hostnames if required.

A complete list of IP addresses and ports supported by the platform can be found on the [Troubleshooting Webcast & Chat Problems](#) page.

Is this an uncommon request?

No. As noted above, most organizations have their firewalls configured so that any unexpected traffic is blocked. Many other real-time communication systems, including Skype for Business and Cisco Telepresence, also require an organization to allow UDP traffic.