

Datasheet: Interactive Broadcast



Core Features | How it Works | Benefits | Technical Specifications



What is Interactive Broadcast?

The OpenTok Interactive Broadcast API makes it possible to embed large-scale interactive broadcast experiences directly into websites and mobile applications.

The Interactive Broadcast API combines live video, content sharing, and streaming capabilities into a single, easy-to-use feature. Broadcasters can host an event for hundreds of participants to interact simultaneously in real time, stream to thousands with HTTP Live Streaming (HLS) and use built-in recording capabilities to create high-quality content for distribution, without the need for any specialist equipment.

Core Features

Scalability

Use Live Streaming to extend broadcast experiences to an unlimited audience size and non-WebRTC endpoints with minimal latency.

Real-time Interactivity

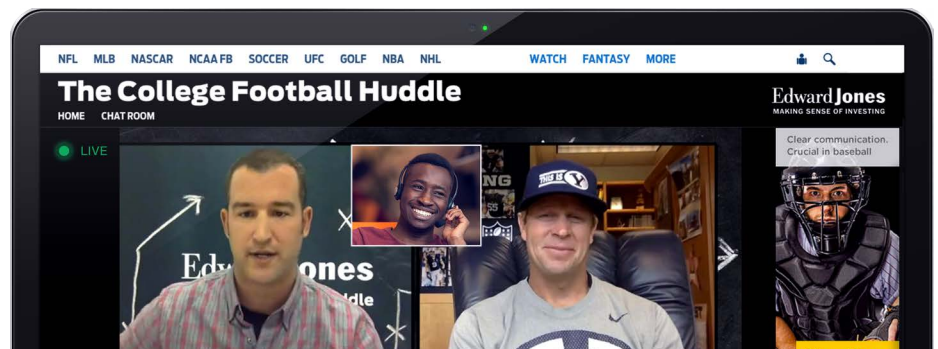
Enable audience members viewing the content to engage with presenters in real time.

Recording Capability

The event doesn't end with the live show. Broadcasters can create TV-ready content using built in archiving capabilities for distribution.

Co Browsing & Content Sharing

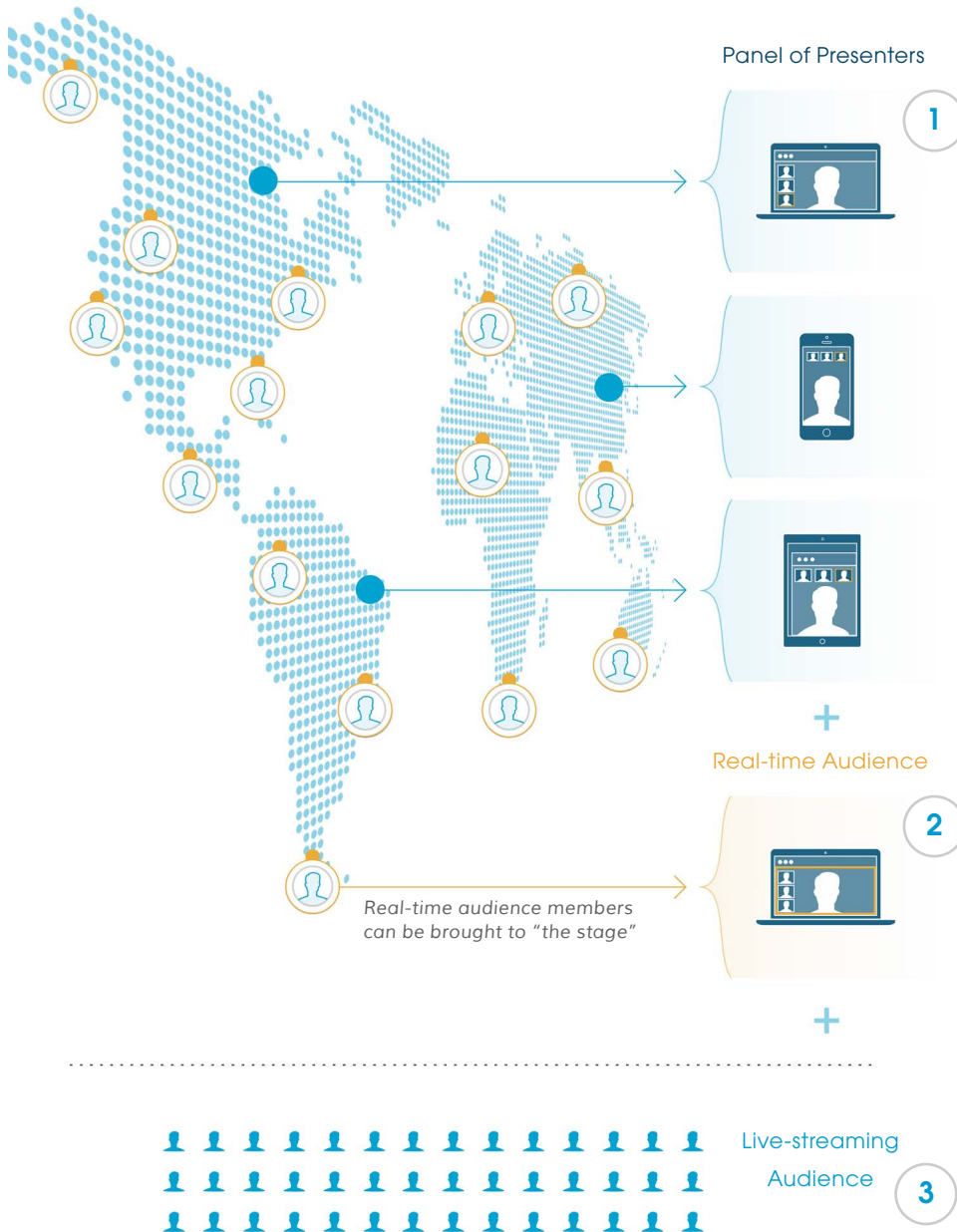
Using screen sharing and collaboration features, all participants can view shared content in real time.



What is WebRTC?

WebRTC (Web Real-Time Communication) is an open standard for embedding real-time communications directly into web browser and mobile applications. WebRTC offers better video quality than predecessor technologies, up to 6x faster connection times, reduced audio/video latency and complete customizability.

How it Works



- 1 Presenters or Panelists are content creators that can join an interactive broadcast session from anywhere in the world, on any device. Presenters can live broadcast and interact with audience members, and live stream to thousands of remote viewers.
- 2 Up to 300 participants can watch the stream in real time and interact with the presenters. They have the option to join the live session and once "on stage", the audience member can be seen and heard by the broadcast audience.
- 3 A large live-streaming audience can view the broadcast from any device anywhere in the world, including non-WebRTC endpoints, with a 15-20 second delay.

Benefits

Increased Reach & Audience Engagement

With 300 real-time viewers and an unlimited live-streaming audience, broadcasters can achieve unprecedented reach and audience engagement.

Flexible Content Creation

Broadcasters have the flexibility to tailor their experience to their use case whether they need one or multiple presenters or interactivity between participants and presenters.

Easy to Customize & Embed

Interactive Broadcast capabilities embed seamlessly into existing websites and mobile apps. Customers have total control of the UI and experience.

Mobile Made Easy

Interactive broadcast works and interoperates across a wide range of web and mobile devices.

Manageability

The OpenTok Platform offers tools, analytics and global infrastructure to make it easy to develop & manage your application. The platform scales to meet your needs.

Technical Specifications

Capacity

Live Interactive Video - Up to 300 real-time viewers
 (Support for >300 real-time viewers in currently in Beta)

- Support for up to 5 presenters or 5 panelists

Number of presenters	Simultaneous live interactive viewers supported
1	300
2	150
3	100
4	75
5	60

** If screen-sharing is used, this will be treated as an additional presenter*

Live Streaming - No limit on audience-size

Endpoints Supported

Live Interactive Video

- Mobile - iOS, Android
- WebRTC-supported Browsers - Chrome, Firefox, IE, Opera
- Windows, Mac, Linux

Live Streaming

- On any endpoint that supports an HLS player
 - HLS is natively supported on Safari (Desktop & iOS), Chrome (iOS & Android), Microsoft Edge
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Duration

Live Interactive Video - No limit

Live Streaming - 2 hours

Recording/Archiving - 2 hours

End-to-End Latency

Live Interactive Video - Real-time

Live Streaming - 15-20 seconds

Recording

Record sessions in real time as composed MP4 files or Individual streams

Quality Supported

Live Interactive Video

- Stream Encoding - VP8
- Resolution - HD (1200X720), VGA(640x480), QVGA(320x240)
- Maximum Frame Rate - 30fps

Live Streaming

- Streaming protocol - HLS
 - Bit-rates supported - 200 Kbps, 500 Kbps, 800 Kbps
 - Resolution - VGA(640x480)
 - Maximum Frame Rate - 25fps
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Technical Specifications

Live Streaming Architecture

Globally Distributed CDN

HTTPS Supported

Yes

Limit on Concurrency

None

Live Streaming Protocol

HTTP Live Streaming (HLS)

RTMP to support integration with Facebook Live and YouTube Live currently in Beta

Notes:

- Live Streaming (HLS) broadcast can include up to 9 streams from the session, we recommend adding no more than 5 streams (or quality will degrade). If the session includes more than 9 streams concurrently, the additional streams will not be included in the broadcast.
- The HLS stream is delayed 15 to 20 seconds behind the live streams in the OpenTok session. During the initial delay, the broadcast stream is not available. Do not provide the broadcast URL to clients until the HLS stream is available.

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