




Making your content

(A) Live

LiveBroadcast™

Now, broadcast live content over the Internet to thousands of viewers in a high-quality, highly reliable experience that rivals television.



Tata Communications' LiveBroadcast™ service is the first cost-effective, carrier-grade, live broadcasting solution that enables TV broadcasters, event organizers and media companies to broadcast live content over the Internet to millions of viewers in a high-quality, highly reliable experience that rivals television.

The LiveBroadcast service, part of Tata Communications' suite of Content Delivery Network (CDN) services powered by BitGravity's technology, is a Flash-based streaming service for broadcasting TV quality live content on the Internet. The LiveBroadcast service eliminates the need for expensive hardware and proprietary software and does not require a special downloaded media player to view live content. LiveBroadcast is easy to deploy and streamlines necessary computers to a single device, a CPE, and has reduced system costs to less than half the cost of other installations.

Tata Communications' LiveBroadcast service provides an end-to-end solution that replicates and distributes content within a two- to four-second delay, using the company's extensive Tier-1 IP backbone. Distributed Origin technology is used to deliver Flash/H.264 video-on-demand services and incoming live streams are simultaneously replicated on every delivery node leveraging the Tata Communications' IP backbone. Since no proprietary live server-based solution is used, the LiveBroadcast service can easily scale to handle any live event.



Ease of use

Request as many publishing points as required at no extra cost, for separate events, or different bitrates for the same event. Creation of Publishing Points is made easy through the web dashboard, 24/7/365.

Local configuration of the encoding CPE is a “no brainer”, all managed through a web interface, allowing you to choose your Publishing Point, bitrate, frames per second and resolution in a few clicks.

No need to perform complex calculations on sizing the event before it takes place. LiveBroadcast is based on standard protocols known to be scalable for ingestion and delivery of your live feed. We won't have to dedicate any specific Streaming Servers to match your live event, however big your audience.

Top ranking performance

Ingestion and delivery is based on very standard and scalable technologies. That, together with Tata Communications' Tier-1 IP network, and its ability to maintain replicates of your initial live feed, brings the most agile Live Video Service of the industry.

Adapt to virtually any end user context in delivering a whole variety of bitrates to your end user, and use Automatic Rate Throttling to enable your audience to view your live event in the best quality available regardless of their local Internet Access bandwidth.

The Online video player generator allows you to base your delivery on Flash Video or MP4, making LiveBroadcast service available without prior specific client download, therefore leveraging a broader audience.

Complete control over your LiveBroadcast™ event, a few clicks away

Our CPE's licensed encoding software distribution is provided with a web configuration panel that enables full bitrate, frames-per-second, resolution configuration, in just a few clicks.

Online video player wizard allows you to configure every single parameter of your LiveBroadcast event in a few clicks: pre-roll, post-roll, overlay logo, player custom skin, fallback bitrates, auto vs. manual rate-throttling.

Via your web dashboard, monitor every single property of the event: live count of the audience, encoding CPE latency and bitrate variations, as well as delivery properties: map the geography of your audience, view the volumes of data for each publishing point in terms of geography, ISP networks in visual and crystal-clear display.

“ Download computable reports in CSV or XML format for further offline computation and analysis of your web events, on any chosen time window.”



Technical specifications

Local Live Encoder (CPE) required on customer end, can be:

- Provided by Tata Communications
- Independently purchased by the customer, upon advice requiring the licensed LiveBroadcast™ Software package
- Based on prior specifications handled by Tata Communications' Content Delivery services

Live video feed to be locally encoded by CPE can be handled through:

- DV over Firewire (IEEE1394 – most widespread standard for MiniDV digital cameras)
- Converted to DV using third-party converters:
 - SDI from traditional broadcasting signals
 - Analog (S-video, Composite, VGA)
- More to come briefly

CDN Platform inbound ingestion of the video stream

- Done by choosing amongst your available Publishing Points on the local encoding CPE
- Through raw TCP PUSH to the selected Publishing Point
- Through raw TCP PULL from the platform
- More to come briefly

CDN Platform Outbound end user stream format

- Pure Flash video
- HTTP progressive download only delivery

Regional Office Locations

India

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Available delivery formats

- Flash FLV using On2 VP6
- Flash MP4 using H.264 to come
- Bitrates from 50kbps to 2Mbps (more to come), depending on feeding location's available Internet access bandwidth
- Bitrate throttling through as many bitrates as available Publishing Points

Resiliency options, through:

- Multiple encoding CPEs on the same customer site
- Multiple encoding CPEs on separate customer sites
- As many Publishing Points as required for both resilience and Rate Throttling

Monitoring and Management:

- 24x7x365 through Tata Communications' IP NOC
- 24x7 statistics available through web dashboard, with instant values of audience, delivery volumes, geography of end users
- Request for Publishing Points submitted through web dashboard

SLA

- 100% SLA guaranteed on the delivery portion
- Feeding portion is dependant on chosen resilience model and local Internet access bandwidth

Australia

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