

# LiveBroadcast™

Making  
your content  
(A)Live



First scalable, cost-effective carrier-grade solution to broadcast live content online in SD and HD formats.



**Tata Communications LiveBroadcast is the first and only standards based – SD and HD 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.**

## Features

- Broadcast resolutions include 480p, 720p or 1080p at 30 fps
- Fast setup and minimal hardware requirements result in low up-front costs
- Dedicated nodes in North America, Europe, Asia and India for global availability
- Fully distributed, massively scalable architecture at affordable pricing
- Reduced routing and shortened transits deliver live broadcasts instantly
- High throughput ensures play without buffering or freezing
- Flash-based delivery means no end user download is required to view the stream
- Video streams bitrates can be dynamically adjusted to match end user available bandwidth
- Request as many publishing points as required at no extra cost
- Unique DVR functionality. Users can pause, rewind, restart and jump to any point within a live or VOD-streamed broadcast
- Real-time and historic textual and graphical reporting provides analytics such as status of live feeds, network latency and number of concurrent streams
- 24x7 support available to ensure success of your business



# Specifications and Requirements

## LiveBroadcast™ SD (480p)

- Selectable resolutions up to 480p anamorphic
- Selectable frame rates up to 30fps
- H.264 codec
- Start times within 0.0 to 2.0 seconds
- Delay is 2.0 to 4.0 seconds
- Works over HTTP and through firewalls
- No NAT traversal issues
- BitCast™ patent-pending routing protocol and technologies

## LiveBroadcast HD (720p and 1080p)

- Resolutions of 720p and 1080p
- Encodes native sources up to 30 frames per second
- H.264 codec
- Start times within 0.0 to 2.0 seconds
- BitCast patent-pending routing protocol and technologies
- Delay is 4.0 to 6.0 seconds
- Works over HTTP and through firewalls
- No NAT traversal issues

## Hardware and Software Requirements

- Encoding hardware: Apple Mac-Mini
- Encoding software: BitGravity Transcoder
- Source feeds: 480p
- Inputs: A Mac-Mini and above supports DV video via FireWire. The Mac Pro additionally supports component video, SD-SDI and HDMI through an optional Blackmagic PCI expansion card (Blackmagic's DeckLink HD Extreme 2 or DeckLink HD Pro PCIe are proven in production environments)

## Hardware and Software Requirements

- Encoding hardware: Apple Mac Pro
- Encoding software: BitGravity Transcoder
- Source Feeds: 720p or 1080p input
- Inputs: The Mac Pro supports HDV video via FireWire, and supports component video, SD-SDI, and HDMI through an optional Blackmagic PCI expansion card (Blackmagic's DeckLink HD Extreme 2 or DeckLink HD Pro PCIe are proven in production environments)

	Tata Communication CDN Distributed Origin Network	Caching Proxy Network 1	Caching Proxy Network 2
<b>Architecture</b>			
Built and optimized for Real-Time Applications	✓✓		
BitCast™	✓✓		
Streams over HTTP	✓✓		
FMS Server Required		✓	✓
Solid State	✓✓		
API Enabled	✓✓		
<b>Geography</b>			
North American Nodes	✓✓	✓	✓
European Nodes	✓✓	✓	
Asian Nodes	✓✓	✓	
<b>Quality</b>			
High-Def TV-quality broadcasts output in 720p and 1080p	✓		
<b>Reliability</b>			
No NAT transversal issues	✓		
100 & SLA	✓✓		
<b>Features</b>			
Automated bitrate adjustment	✓		
Auto Reconnect	✓✓		
DVR-like capabilities	✓✓		

For more information please visit [CDN.TataCommunications.com](http://CDN.TataCommunications.com) or email [CDN.Solution@tatacommunications.com](mailto:CDN.Solution@tatacommunications.com).



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