Telebreeze Middleware

The core of the platform – Telebreeze Middleware controls all of the modules at all levels.

- Operator Dashboard
- Customer Management System
- Content Management System
- Billing (integration with 3rd party payment systems) and payment reports
- Email notifications
- Geo IP filtering
- Realtime Statistics
- Ad insertion
- Load balancing
- Servers management and monitoring
- Customer Portal
- DRM: PlayReady, Widevine, AES
The Telebreeze Player is a cutting edge subscriber’s interface for accessing media content. The player supports the most popular operating systems such as Windows, MacOS, Linux, Android, and iOS. The player is compatible with all major Smartphones, Tablets, TV Boxes, and PCs. This ensures subscribers will have their media at their fingertips no matter the location.

Telebreeze allows its subscribers to access high-quality media content on virtually any device.

- Live Streaming playback and archive
- EPG
- Ad insertion
- Video on Demand
- In-app online shop
- Social network authorization
- Favorite channels
- Pause and seek of live channels
- White label
- Design & usability customization
Telebreeze Coder

<table>
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<tr>
<th>Features</th>
<th>Description</th>
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<tbody>
<tr>
<td>Performance</td>
<td>up to 40 SD or 10 HD channels</td>
</tr>
<tr>
<td>Input streams / interfaces</td>
<td>UDP, TCP, RTP, HLS, HTTP, RTMP (MPEG-TS)</td>
</tr>
<tr>
<td>Output Streams</td>
<td>HLS, HTTP, UDP</td>
</tr>
<tr>
<td>Video / Audio Formats</td>
<td>MPEG-2 Video, H.264/AVC, MPEG Layer Audio, AAC</td>
</tr>
<tr>
<td>Hardware</td>
<td>1U / Intel® Xeon® Processor E3-1275 v5 / 2x8GB RAM</td>
</tr>
<tr>
<td>Operation System</td>
<td>CentOS 7.3 Ext4</td>
</tr>
<tr>
<td>Preprocessing</td>
<td>Resize, Deinterlace, Frame Rate Conversion, Audio Resampling, Logo Rendering</td>
</tr>
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</table>

A real-time encoding/transcoding solution Telebreeze Coder is one of the most powerful software products on the market providing uncompromising quality. Telebreeze Coder allows broadcasters and service providers to deliver multi-feature services in resolutions up to 4K.

- Input stream encoding into several output streams with various resolutions/bitrates (Adaptive Live Streaming)
- Extreme effectiveness of computing resources usage significantly cuts expenses for IPTV head-end hardware
- Ability to increase the number of channels, or shift to HDTV streaming without upgrading delivery channels
- Highest video quality, unachievable for hardware solutions
- Simple web interface to configure the server
- Support of Intel® Quick Sync Video hardware acceleration
The Telebreeze Media Server delivers content to end-users and also makes it possible to stream live unicast over a network connection.

The server can be utilized to live stream between two or more work stations with an internet connection for further content broadcasting to end-users.

The HLS support provides adaptive streaming for networks with unstable bandwidth such as 3G. Which ensures smooth distribution of the media content of different quality to users with variable bandwidth.

The server can distribute media content live via and Internet connections to different types of end-user devices, such as set-top boxes, smartphones or HD displays. This feature enables IPTV operators to reach a wide range of mobile subscribers which used to be an impossible task due to restrictions of a user’s Internet connection.

- Adaptive Live Streaming (HLS / HTTP)
- Deliver content from Telebreeze Coders
- Ability to use as a content delivery network node
- Archive
Telebreeze Video on Demand is a high-performance software for Video on Demand service providers, which is capable of serving up to 8000 concurrent connections at one server.

Telebreeze Video on Demand allows operators to automatically prepare their content for adaptive streaming with the highest quality. The software provides secure access to the content using an Internet connection.

- Adaptive streaming (Apple HLS / HTTP)
- Secure access to content
- Automatic content preparation
- Integrated metadata database for movies

### Features

<table>
<thead>
<tr>
<th>Output Streams</th>
<th>HLS, HTTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Formats</td>
<td>AVI, MP4, FLV, ASF, MKV, TS</td>
</tr>
<tr>
<td>Hardware</td>
<td>Intel® Xeon® Processor E3-1275 v5 / 32GB RAM / RAID HDD</td>
</tr>
<tr>
<td>Operation System</td>
<td>CentOS 7.3 Ext4</td>
</tr>
</tbody>
</table>
Telebreeze Solution Principal Scheme

- **Satellite Dishes**
- **DVB / IP receivers**
- **RF**
- **Eth0**
- **Eth1**
- **MPEG2TS Multicast / UDP**
- **Input to coders**
- **Output from receivers**
- **Operator dashboard**
- **Telebreeze Coder**
- **Input to coders**
- **Telebreeze VoD**
- **Output from receivers**
- **Local network or Internet**
- **Billing**
- **DRM**
- **Telebreeze Middleware**
- **Telebreeze Media Server**
- **Customer Network**
- **Customer devices**
- **Wi-fi Access point**
Order a free calculation of your project and demonstration of the solution.

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