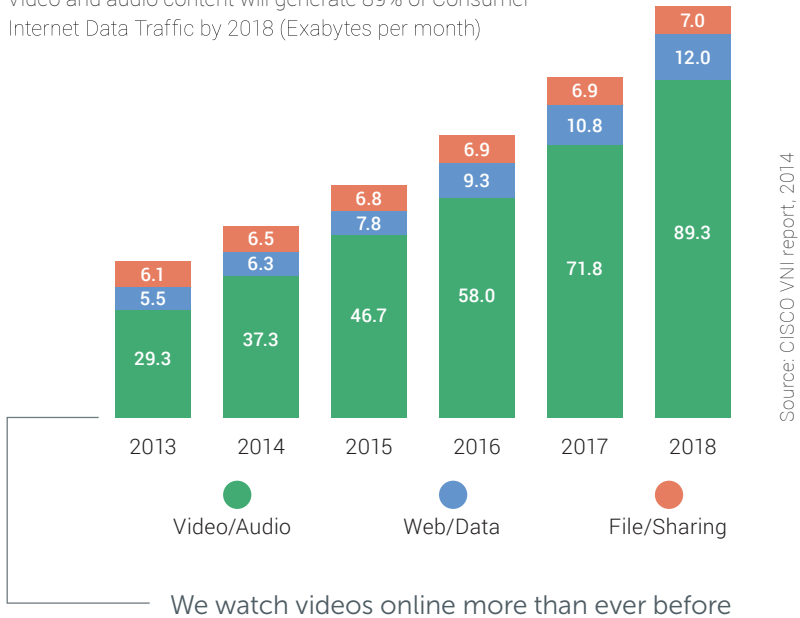# Everybody Watches Video Online
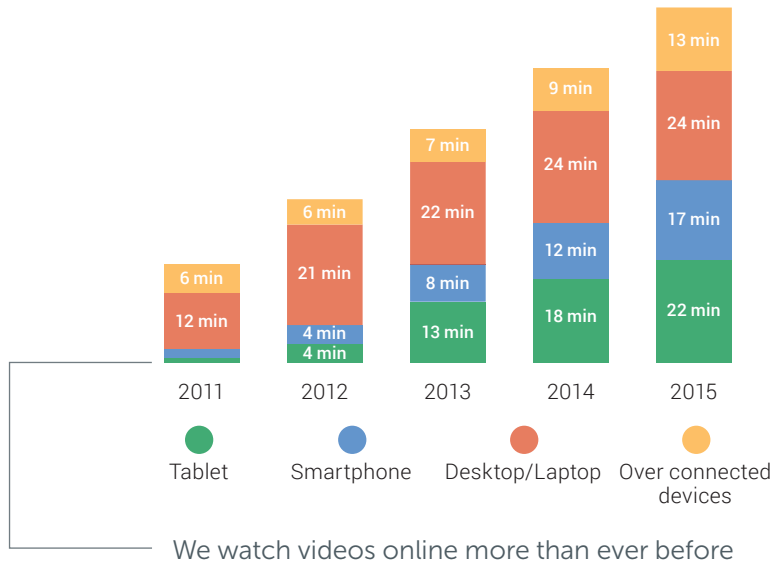
Video and audio content will generate 89% of Consumer
Internet Data Traffic by 2018 (Exabytes per month)

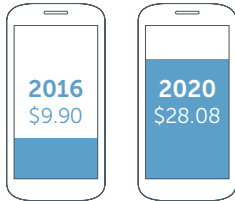| Year	File/Sharing	Web/Data	Video/Audio
2013	6.1	5.5	29.3
2014	6.5	6.3	37.3
2015	6.8	7.8	46.7
2016	6.9	9.3	58.0
2017	6.9	10.8	71.8
2018	7.0	12.0	89.3

● Video/Audio   ● Web/Data   ● File/Sharing

We watch videos online more than ever before

Online Video Must Be Fit for Any Screen, Especially Mobile

We spend more and more time watching content on mobile devices.

Year	Over connected devices	Desktop/Laptop	Smartphone	Tablet
2011	6 min	12 min		
2012	6 min	21 min	4 min	4 min
2013	7 min	22 min	8 min	13 min
2014	9 min	24 min	12 min	18 min
2015	13 min	24 min	17 min	22 min

Tablet Smartphone Desktop/Laptop Over connected devices

We watch videos online more than ever before

Video Formats Are Evolving

It's a well-known fact that TV channels, TV shows, and video on demand have gone digital. But online video is more than that.

Video Rules in Advertising

Digital – US Digital video ad spending is predicted to reach $28.08 billion in 2020, up from $9.90 billion in 2016. These figures will make video the fastest-growing category on mobile, on desktop and overall from 2016 through 2020. *(Cowan and Company, 2016)*

2016
$9.90

2020
$28.08

Programmatic – By 2017 more than half of all digital video ad spending in the US will be programmatic. In 2016 programmatic video ad spending will reach $5.51 billion, representing 56.0% of total digital video ad spending. *(eMarketer, 2016)*
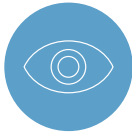
In Europe, programmatic video ad revenues will reach € 375 million ($495 million) in 2015 and rise to €1.967 billion ($2.610 billion) by 2020 – an average annual growth rate of 39.3%. *(eMarketer, 2015)*
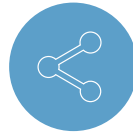
Video Is Publisher's New Favorite Tool

36% more engagement

81% more views

84% more shares

By adding audio or video to stories, companies can see a 36% increase in overall engagement, 81% more views, and 84% more shares. (Mediapost, 2015)

Video Is Fundamental to Marketing

70% of B2B marketers already invest in video marketing, 84% are planning to increase their video marketing budgets in the next year (Regalix, 2015)

SPB TV Astra — Future-Proof Video Transcoding Solution for Your Needs
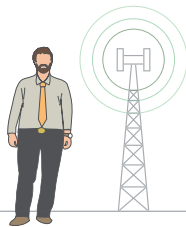
To grow your business, add multi-screen online video to the equation.
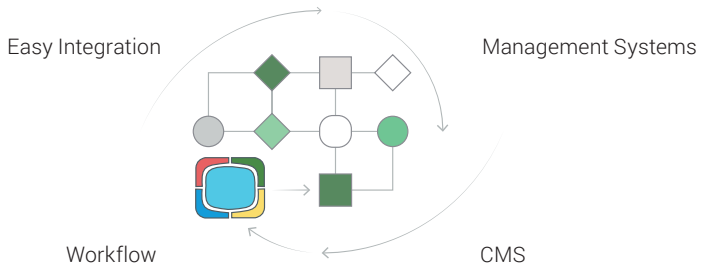
Online Education Platform

Publisher

Telecom Operator

Broadcaster

Ride the "video wave" with a highly-effective and reliable video processing solution by SPB TV.

Software-Defined Transcoding

SPB TV Astra handles all video processing tasks from video and audio decoding, volume control, encoding, to packaging and DRM encryption.

It can be delivered in a flexible software-based configuration and can easily be integrated into an end-to-end video delivery platform, maintained and scaled whenever necessary.
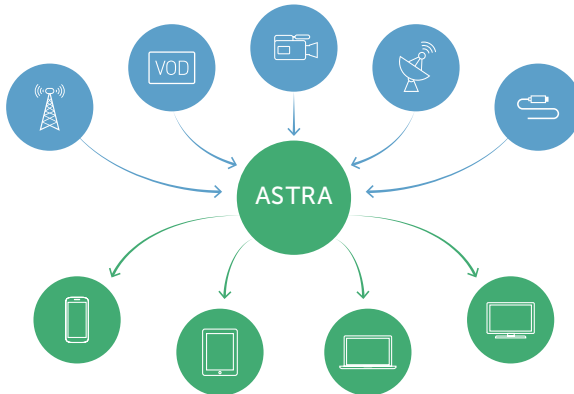
Easy Integration

Management Systems

Workflow

CMS

SPB TV Astra makes your video ready for streaming over any content delivery network or any type of caching web server.
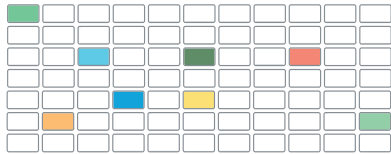
Comprehensive Video and Audio Encoding

Convert any video linear TV channels, video on-demand, live broadcast for online delivery to any device – mobile, tablet, desktop, and living room devices (TVs, set-top boxes, dongles).

SPB TV Astra can process various input formats from satellite or terrestrial networks, as well as from broadcast studios.

It efficiently encodes them to RTP or UDP Unicast/Multicast and OTT multi-bitrate formats.

Outstanding Performance

SPB TV uses effective software encoding algorithms combined with hardware acceleration. We support up to 100HD channels per two-unit server consuming only 1.1kW of power.

100 HD Channels/ 2 Unit Sever

This allows for a dramatic reduction in video delivery costs, as well as a decrease in power consumption and an overall lower environmental footprint.

Eco-friendly

Comprehensive Video and Audio Encoding

Astra supports a broad range of codecs, including MPEG-2, MPEG-4 (H.264), HEVC (H.265), Dolby and DTS. With our technologies you can bring immersive, cinematic sound to any device, including smartphones and tablets.

H.264 MPEG-4/AVC | MPEG-4 | MMS | 360°

DVB-S DVB-T DVB-C | MPEG2 | HLS LIVE | HTTP @

RTP | H.265 HEVC | RTMP | DTS

SPB TV Astra prepares Apple HLS, Microsoft Smooth Streaming, Adobe HDS, RTMP, and MPEG-DASH streams in multiple profiles. You can decide if you prefer to experiment with various quality options, or you can decide to use SPB TV's encoding presets that proved to be the most efficient for popular devices and prevalent network bandwidths.

Management and Control

Manage video and audio encoding tasks through a convenient web interface. Customers are provided with the access to their personal account of Astra selfservice portal and comprehensive technical support.

Secure Valuable Content

To ensure reliable protection of premium content streamed to any end-user device, SPB TV has developed a multi-DRM approach. SPB TV Astra supports integration with the most trusted DRM-systems, including Verimatrix, PlayReady, Widevine and Adobe Access, Fairplay and standard AES-128.

Check Astra Specs

SYSTEM HARDWARE	
CPU	Intel Based Servers
IP Input Interfaces	2x Gigabit Ethernet (bonded or stand alone)
Optional Digital Input Interfaces	SDI, DVB-S
OS	Linux CentOS
INPUT	
Input IP Streams	UDP Unicast/Multicast, HTTP, HLS, RTSP, RTMP, MMS
Supported Codecs	MPEG-2, MPEG-4, H.264, MPEG-1, MPEG 1 Layer 3, AAC, HE AAC, AC3, WMV 7, WMV 8, WMA 1, WMA 2, WMA 9 Pro, On2 VP3, On2 VP5, On2 VP6, On2 VP8, PNG, Intel Media Server Studio
Filters	Video cropping, image insertion on input source loss, automatic audio loudness adjustment
OUTPUT	
Output IP Streams	UDP/RTP MPEG-TS Multicast/Unicast, HLS, HDS, Smooth Streaming, MPEG-DASH
Output Codecs	H.265, H.264 (Baseline, Main, High), MPEG-4, MPEG-2, AAC, DTS, Dolby Digital Plus
VoD Output	Multi Track MP4
VoD Publishing	FTP, SFTP, S3
Thumbnails	PNG, JPEG
MANAGEMENT/MONITORING	
Monitoring	SNMP v1, v2 Traps, input streams monitoring and notification
System Integration and configuration	Web-based user interface
Redundancy	N+1 High Availabitlity is achieved using SPB TV Astra Management Console

SPB TV Overview

- IP, OTT (Over-The-Top) and mobile TV technological solutions
- Turn-key solution for TV providers, network operators and broadcasters
- Partner with large network operators and media companies: Lebara, Amedia,
- MTS, Beeline, Mobilink, Tele2, MegaFon and more
- 80% of team members are in R&D
- On the market since 2007

Awards 2015–2016

Winner: Best TV Everywhere multi-screen video

Winner: Best IP TV & OTT TV Platform

Winner: Best Cloud Solution

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