

Airflow



Next generation Multi CDN

Easiest workflow | Intelligent | Highest performance | Highest uptime | Lowest TCO

+100 MultiCDN customers | Award winning platform

100% uptime | 100% performance | 50% TCO reduction | 100% satisfaction

Jet-Stream Airflow

Complex Multi CDN made easy and affordable

Signing up, and integrating multiple CDNs, monitoring and running a multi-CDN environment is difficult and expensive. Often, MultiCDN degrades you to the minimal feature set of the lowest common denominator.

Introduced in 2015 - often copied but never equaled - Jet-Stream Airflow is the leading Multi CDN streaming platform that offers deep CDN integration, active load balancing, independent monitoring, intelligent algorithms and by far the best workflow automation.

Airflow greatly reduces time to market. It takes the headache out of managing a multi CDN environment. Airflow slashes total operational costs by 50% for our customers.

Airflow orchestrates world class CDNs in one unified platform. All the streaming workflow features are available, regardless the dynamic mix of underlying CDNs. Airflow goes beyond switching, it lets you fly beyond the CDNs, beyond the clouds.

Fly above the clouds, fly Jet-Stream.

25 YEARS STREAMING

1994: We invented streaming

On November 4 1994, we produced the very first live webcast in the world, as far as we know. We sparked live streaming, 25 years ago. Since then, we were on a mission: we are here to professionalise and scale the web for streaming media.

Documentary: Ready Set Rock 'n Roll

This award-winning documentary by Alex Pitstra and Koen de Koning goes back to 1994 and tells a tale about rock music, the digital tidal wave, some young guys with a modem and a crazy idea to live stream a concert on the world wide web:

Watch the film on 25yearsstreaming.com

READY SET ROCK 'N ROLL

CDN and Multi CDN

About CDNs and Multi CDN

Why use a CDN?

The internet is a global patchwork of thousands of networks. Content Delivery Networks operate servers around the world.

CDNs bring your content closer to your audience. Media loads faster and perform better. CDNs offer scalability and redundancy.

If you want to professionally serve media and live streams to your audience, you want to use a CDN. But which one?

Why Multi CDN?

Each CDN has its benefits and downsides. Some have limited presence in specific regions. Some lack specific features, while others are highly specialized.

Some can be pretty expensive, while others have competitive rates. CDNs can suffer from temporary outages and performance issues.

Multi CDN makes you independent from a single vendor for your core services, it further improves availability and performance.

Jet-Stream is proud to introduce a next generation Multi CDN service that overcomes the hurdles of first generation Multi CDN solutions: Airflow.

10 key Airflow benefits

- 1) TCO reduction
- 2) Highest uptime
- 3) Guaranteed performance
- 4) Integrated suite
- 5) Easy to use
- 6) You are in control
- 7) Future proof
- 8) Streaming specialized
- 9) Workflow automation
- 10) Own technology & operation

Fly above the clouds

Airflow technologies

Airflow is an integrated suite of advanced, future-proof Multi CDN technologies, invented, developed and operated by Jet-Stream.



Integrated CDNs

Airflow is deeply integrated with these world-class CDNs: Akamai, Lumen, Cloudfront, Jet-Stream, Leaseweb, Stackpath & Verizon.



Flight Tracker

Monitors global and regional streaming performance of all CDNs. The network that doesn't require you to implement trackers.



JetAi algorithm

Intelligent Multi CDN optimizer that guarantees delivery, performance and the lowest delivery costs.



Air Traffic Control

The enforced Multi CDN load balancer that enables 100% content availability: Broadcast Grade streaming.



Ground Control

Use your own performance monitors and business logic. This is Multi CDN on steroids.



Cockpit

One platform to rule all CDNs. One platform to automate your streaming workflow. Unified GUI and API, deeply integrated with all CDNs. Slash operational workflow costs. Slash Multi CDN costs.



Afterburner

Multi CDN log processing & analyzer for 100% accurate analytics.
Gain deep insights in media usage, geographies and your audience.



Stealth Shield

The Multi CDN origin shield that protects your servers.
Includes Thundering Herd live stream protection.



Intelligent Origins

Content aware media origins for transmuxing, recording and transcoding.
Manage assets and live streams, manage adaptive bit rate streaming.



Build Your Own CDN

Mix edges, clouds and CDNs.
Build Hybrid CDNs and build private on-premises CDNs.



Privacy Player

Publish your media anywhere.
Unlimited views. Don't pay to play.



Privacy Player Pro

Monetization, branding and interactivity.
Share your creativity, not your data.

World class CDNs

Stream with us, fly with many

These world class CDNs are deeply integrated in the Jet-Stream Airflow Multi CDN service, offering you the largest global delivery infrastructure.

Deep CDN backend integrations

Jet-Stream Airflow integrated CDNs by tapping into their APIs. We flush caches, auto deploy SSL certificates, create origin paths, manage access control, collect and parse access logs, and much more.



Akamai

Akamai is a pioneer. Their industry leading CDN is highly distributed. Akamai covers over 130 countries and 1700 networks. They deliver more than 100 terabit per second.



Cloudfront

Amazon AWS Cloudfront is a superpop architecture CDN, covering 217 locations in 44 countries. CloudFront was the first CDN that was integrated in Jet-Stream Airflow Multi CDN in 2013.



Jet-Stream

Jet-Stream is Europe's streaming CDN. It won many awards including Best CDN, Streaming Dream Team and Fastest Growing technology company.



Leaseweb

Leaseweb operates a global network with over 10 terabit per second capacity. The network is connected to all major global carriers and has over 300 points of presence across the globe.

The logo for Lumen, consisting of the word "LUMEN" in a bold, black, uppercase sans-serif font, with a registered trademark symbol (®) to the right. The text is centered within a light gray rectangular background.

LUMEN®

Lumen

Formerly known as the Level3 CDN, Lumen runs on a 120 terabit per second capacity network, deeply connected to all major internet exchanges and internet providers across the world.

The logo for Stackpath, featuring the word "STACKPATH" in a bold, white, uppercase sans-serif font, with a trademark symbol (™) to the right. The text is centered within a dark blue rectangular background.

STACKPATH™

Stackpath

With over 65 terabits per second and 45 global superpops, Stackpath (formerly known as Highwinds) offers great CDN capacity and performance in Europe, the USA, Asia, Latin America and Australia.

The logo for Verizon, featuring the word "verizon" in a bold, black, lowercase sans-serif font, with a red checkmark symbol integrated into the end of the word.

verizon✓

Verizon

The Verizon Media delivery network spans six continents and is connected to over 5000 networks to deliver your content at high speed, anywhere.

Flight Tracker

Global CDN performance measurement

Flight Tracker

Flight Tracker is our independent global network of streaming performance monitoring agents. CDNs are constantly monitored for availability, connect time and video performance.

Realtime global performance heatmap

Flight Tracker can use both its RUM tracker data and the FlightTracker global agent network to create a real-time heatmap of CDNs performance per region. If you need finer granularity in one country, we can deploy extra agents anywhere in the world. Their footprint is minimal.

No trackers required

Because Flight Tracker uses independent data gathering through its agents, you no longer need to implement and maintain trackers in websites, apps or players for Multi CDN to work. This saves you a lot of implementation work and maintenance. Trackers are nowadays being blocked anyway, crippling performance measurement.

Flight Tracker	Germany	Netherlands	UK	Belgium	France	Italy
Akamai	38x	42x	32x	28x	26x	22x
CloudFront	36x	40x	30x	16x	8x	4x
Jet-Stream	40x	46x	32x	36x	22x	36x
Leaseweb	42x	44x	28x	32x	26x	32x
Lumen	32x	28x	36x	32x	36x	24x
Stackpath	46x	44x	30x	24x	32x	34x
Verizon	34x	36x	18x	12x	42x	38x

Breakthrough insights

Website performance is not video performance

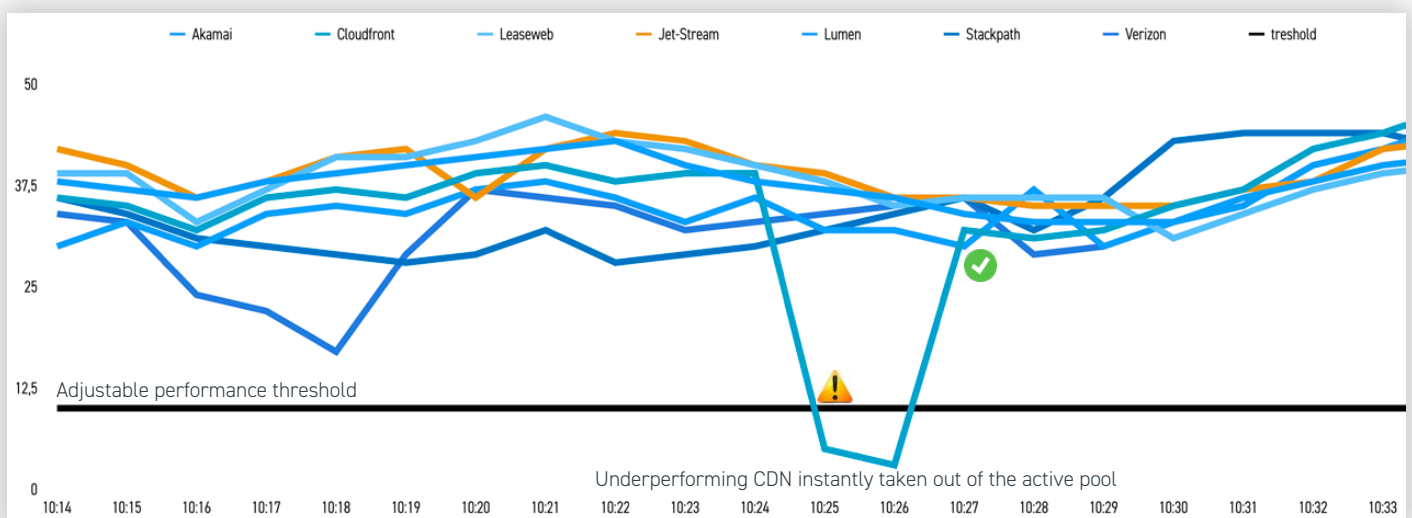
It was always assumed that CDNs typically underperform. But RUM vendors were not measuring video performance, they were measuring websites. You can't assume that website performance data also applies to video.

Most CDNs overperform for video

Flight Tracker data proved the opposite: most CDNs typically overperform for even the highest quality video streaming. CDNs deliver Full HD video chunks at 20x, even 40x speed across the world, while 10x, or even 5x speed is more than enough to guarantee viewers the highest Quality of Experience.

The 'good enough' principle

Flight Tacker gave us a breakthrough insight: why go for the fastest, often the most expensive CDNs? Let's go for all the CDNs that perform more than good enough. If we can apply a minimal quality threshold, we can focus on price instead. It led to the development of a unique intelligent Multi CDN QoE algorithm: JetAi.



The JetAi algorithm

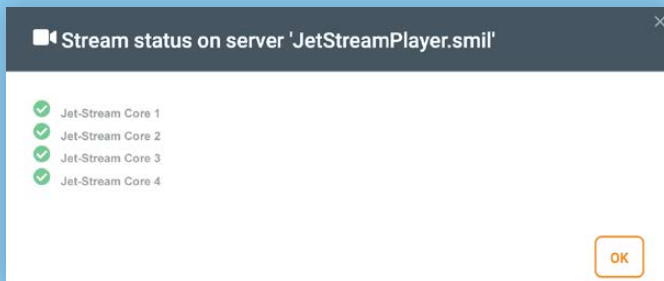
100% performance, 50% cost reduction

Intelligent algorithm

Jet-Stream JetAi is a groundbreaking intelligent Multi CDN algorithm that taps into Flight Tracker's real-time performance data. In addition it calculates over a dozen other dynamic parameters such as content availability, access restrictions, geo fencing, user proximity, content popularity and CDN price per region.

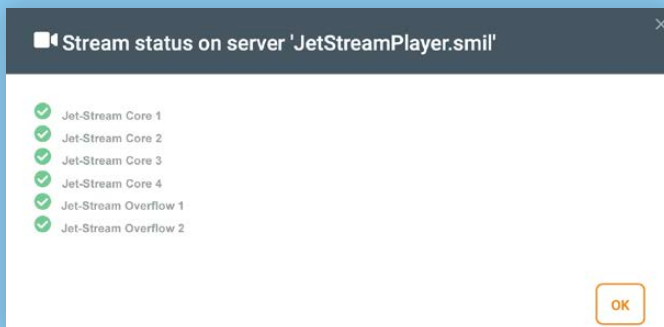
Instant adaption

As soon as Flight Tracker detects an outage or a performance issue, the JetAi algorithm instantly takes affected CDNs or edge servers out of the active pool, for just that region, temporarily. JetAi dynamically updates its recommendations immediately, without any delay.



By default, long tail content is served from the core CDN layer.

In the case of an outage or a performance issue, a location is instantly taken out of the active pool.



Boost:

JetAi noticed the increased popularity of this title and instantly added additional available CDN bursting PoPs.

Viewers are never sent to underperforming PoPs.

Always performing, always the cheapest

JetAi constantly adapts and creates the cheapest mix of CDNs in real-time, maintaining the minimal quality threshold to guarantee performance all the time, 24/7, autonomously.

Dynamic scaling

JetAi does more. For instance, the popularity of each individual title and stream is permanently monitored geographically. JetAi automatically selects the most optimal tiers and mix of CDNs, splitting distribution of long tail and viral content, scaling up capacity automatically.

Business rules

CDN provisioning, popularity thresholds and algorithm overrides can be set per account. The JetAi algorithm instantly adapts to changes.

Massive cost savings

JetAi dramatically drives down costs, while guaranteeing performance. Since streaming is in Petabyte territory, we are talking about massive traffic cost savings here.



Turbo boost:

JetAi noticed the title going viral in EU, USA and Asia.

Multiple CDNs were instantly added to the pool of global delivery resources for this title.

Viewers are only sent to performing and available CDNs and edges in this dynamic active pool.

Jet-Stream Airflow load balancers automatically select the cheapest mix of resources within the pool, per region.

Air Traffic Control

DNS switching is passive

100% platform uptime is not content uptime

First generation Multi CDN solutions use a DNS trick to switch audiences between CDNs. When DNS records are switched, everyone is switched in bulk, which is quite blunt. It's easy to claim 100% Multi CDN uptime in marketing. But in reality it can take hours for DNS based CDN switching to have effect.

DNS was never built for geo load balancing

DNS is a great phonebook for server addresses. But it is a passive mechanism: it gives zero control over DNS caching. You cannot enforce a time-to-live of 1 minute. DNS operators override TTLs for hours. User devices can cache records for even a day.

If DNS is used to switch to another CDN, viewers will still be sent to underperforming CDNs. That is unacceptable for streaming. The blinkenlights are green, but the content is down. You will lose your audience, you will lose money.



Instant, enforced load balancing

Air Traffic Control: enforced, realtime load balancing

Jet-Stream invented Air Traffic Control. It is a real-time, enforced Multi CDN load balancing service. Air Traffic Control uses the JetAi intelligence algorithm. Each individual viewer is personally analyzed and load balanced (not switched) to the most optimal tier, edge or CDN, guaranteed and enforced, all within 1 millisecond. Billions times per month.

Broadcast Grade uptime

Thanks to Air Traffic Control we historically achieved >99.999% actual content uptime, month after month, year after year. We're not talking platform uptime here: content uptime. We call this Broadcast Grade streaming. Content unavailability in the past 5 years was less than 2 hours for live streams and less than 1 hour for VOD streams and downloads. Better uptime and better performance mean more loyal viewers.

The largest CDN capacity

Air Traffic Control don't just switch: your traffic is load balanced across multiple CDNs. We stack their capacity on top of each other, offering the largest CDN capacity in the world.



Ground Control

Multi CDN on steroids

Multi CDN selection API

Ground Control lets you override the JetAi algorithm. For instance, if you use a third party RUM performance monitoring system, you can use their data to instruct the Jet-Stream Airflow platform to prioritize a certain CDN for a specific region, on a per title and per stream level. In real-time.

Use your own business rules and algorithm

For instance, if you have a volume commit with one CDN, you can decide to switch over to a cheaper mix of CDNs as soon as you are going to use extra traffic. Or, you can decide to serve podcasts from one CDN, and your live streams from another mix of CDNs. Serve Asia from one CDN and serve the USA from another. Everything is possible.

Multi CDN recommendation API

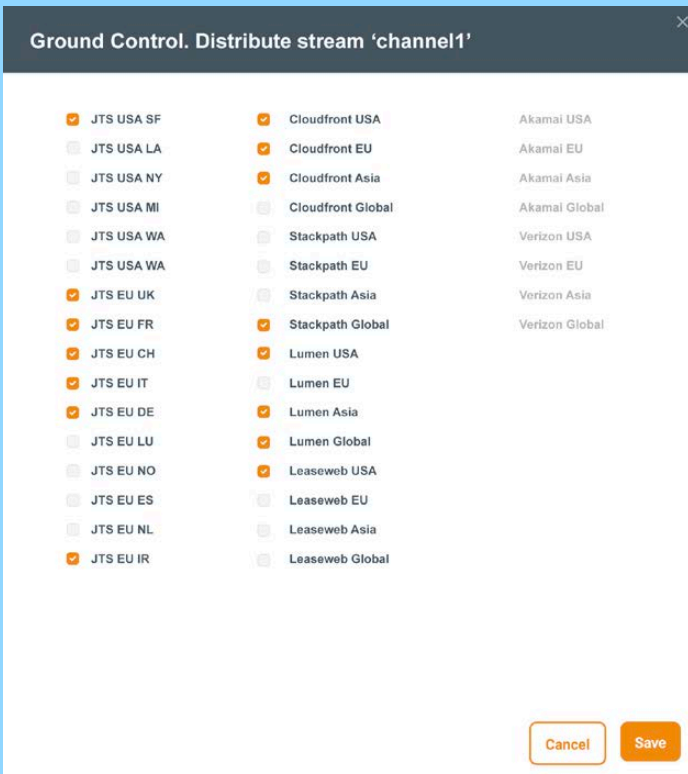
Ground Control allows your players and websites to request a recommendation on behalf of a viewer, through our load balancing API. You can decide to use the recommendation, or you can service the viewer from your own platform, or from a default CDN.

Save more money

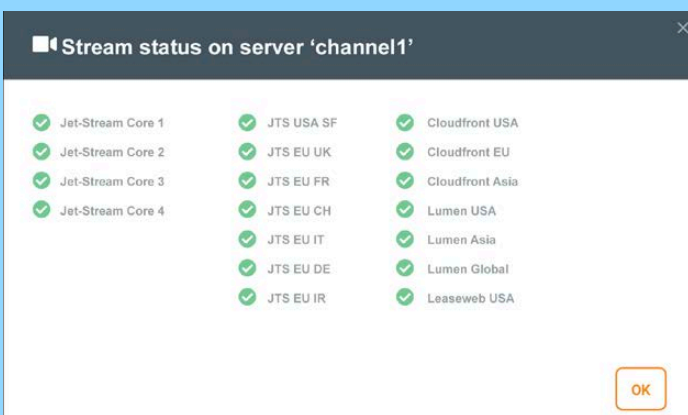
Apply your own Multi CDN business logic thanks to the Jet-Stream Airflow platform.

Decide per user, per title, per stream, per minute, which CDN is being used.

If you think you can beat our algorithm: please do so and save more money.



Use the cockpit or the API to temporarily override the JetAi algorithm. Select your favorite mix of edge pops and CDNs per region, per individual origin, video title or live stream.



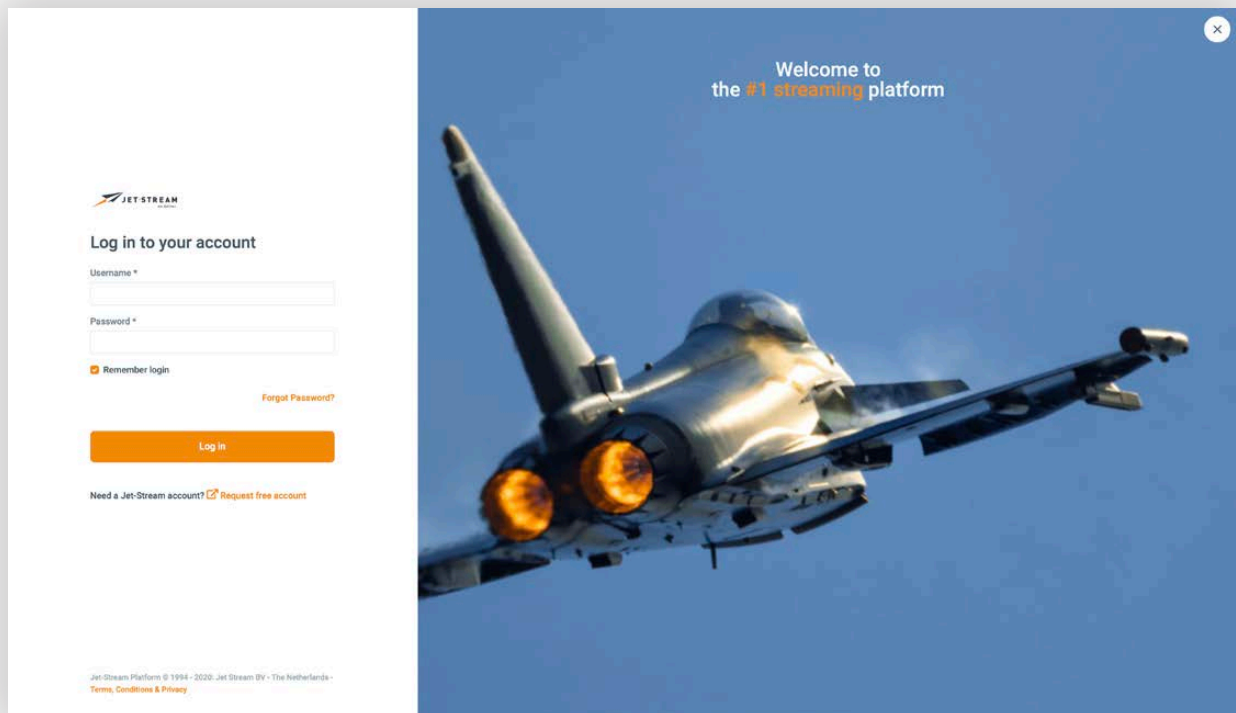
Changes are effective immediately. The JetAi algorithm will instantly geo load balance your audience over the new mix of available resources, for this specific title, still selecting the cheapest path possible.

the Cockpit

One platform to rule them all

Integrated Multi CDN

Jet-Stream Airflow is a unified and integrated Multi CDN platform. There's no need for you to sign up with or configure individual CDNs. CDNs and edge servers are automatically provisioned per individual account, globally and regionally. Changes are effective immediately.

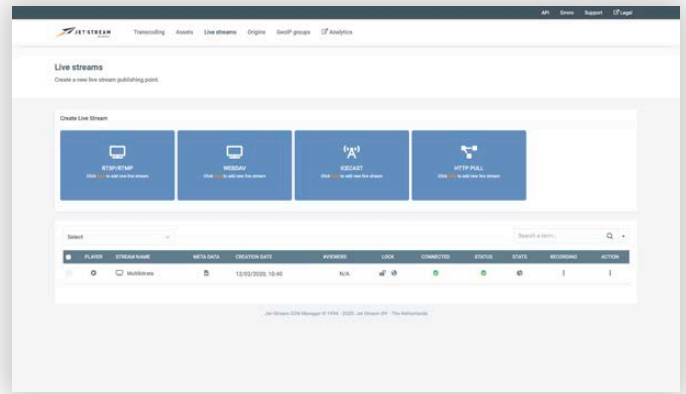
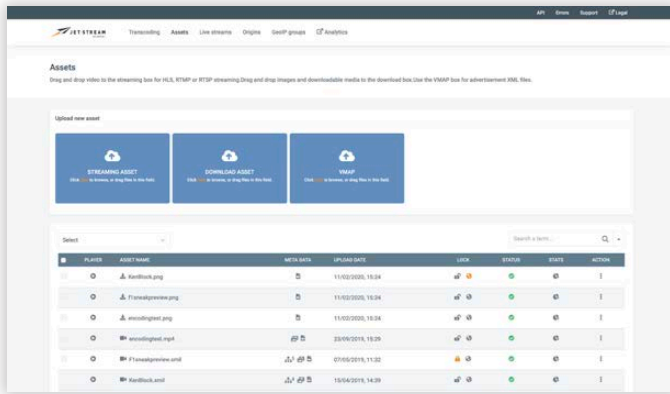


One vendor

All technologies and services are researched, invented, developed and operated by Jet-Stream. We are not offering a mix of services with third party vendors or third party operations, except for the CDNs. With our +25 years experience with streaming and CDN, we have your back.

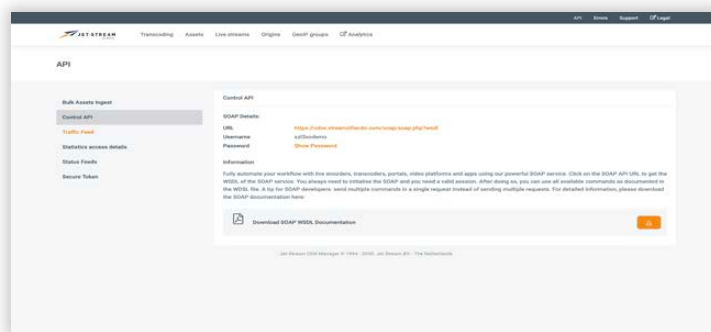
Cockpit: all streaming features

Use the Cockpit web interface to centrally manage cache flushing, access control, security and geo fencing. Provision origins, upload your media, setup live streams, real-time transmuxing, schedule recordings, do live transcoding and get detailed statistics and analytics. Everything works regardless the dynamic mix of underlying CDNs.



Workflow automation

Our powerful unified backend API lets you control and monitor everything. Create users with limited rights and automate your workflow. By making workflow automation a breeze, we save you time, money and headaches. Because you can do everything yourself, it saves us time and money too. We actually save the CDNs a lot of work too: all they have to do is let the traffic flow through and make sure it performs.



Open platform

Jet-Stream is an open platform: your usecase is your workflow. Use any of the Jet-Stream features and integrate the Jet-Stream platform yourself with third party origins, transcoding services, DRM, portals, apps and players. Mix Jet-Stream services with third party services to build your custom workflow.

Afterburner

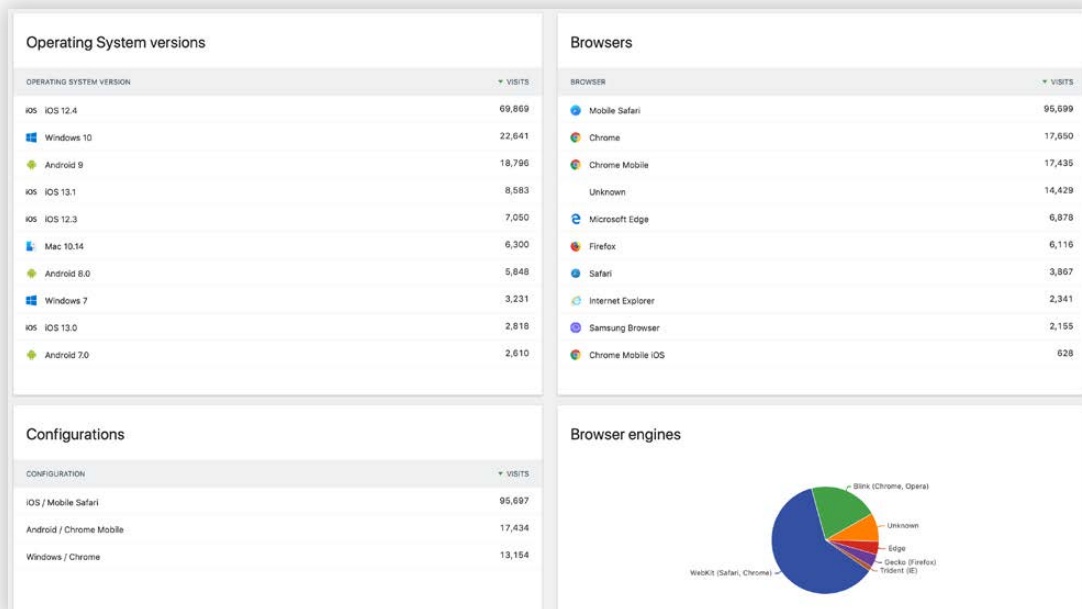
Tracker data versus server logs

Trackers are crippled

Are you still relying on tracker based viewer analytics while almost 50% of your audience blocks trackers? Tracker blocking cripples RUM based analytics. Bad data = bad insights = bad decisions.

Multi CDN access logs

Access logs are 100% reliable and unblock-able. Logs contain very detailed and accurate data, which is extremely useful for analytics.



Jet-Stream Afterburner: 100% accurate analytics

Multi CDN log processor & analyzer

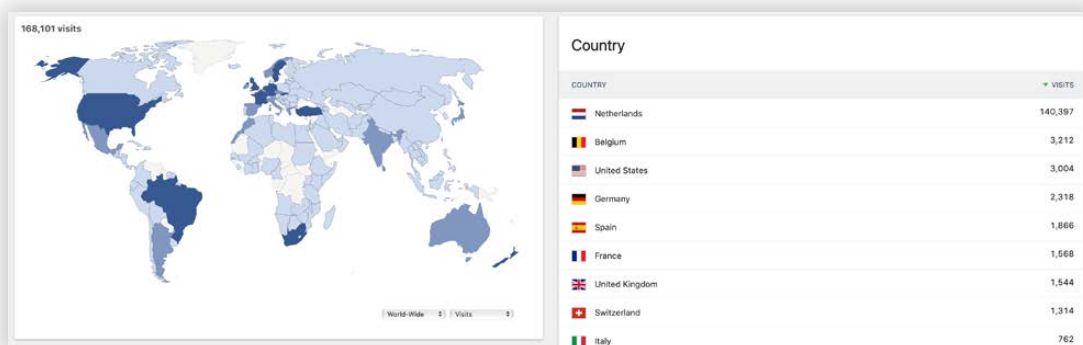
Jet-Stream Afterburner collects your access logs from all the CDNs, rewrites the logs to a universal format and generates accurate, unified logs. Data is anonymized to comply to the strictest EU privacy laws.

Advanced analytics

Afterburner creates reports per day, week, month or year, for most popular videos and streams, view duration, geography, referrer, devices, browsers, viewers, and much more. It is like Google Analytics, but then for video streaming.

100% accurate analytics

Accurate analytics means better insights in content popularity and your audience. Reliable insights give you a competitive advantage.



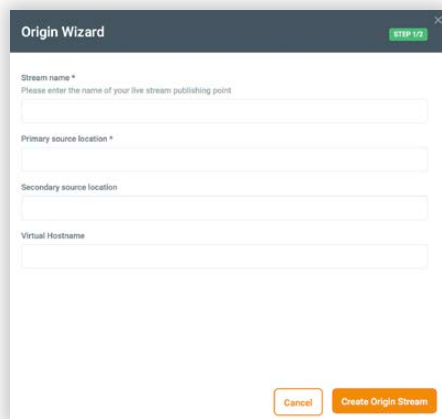
Your origins

Your origins, your workflow

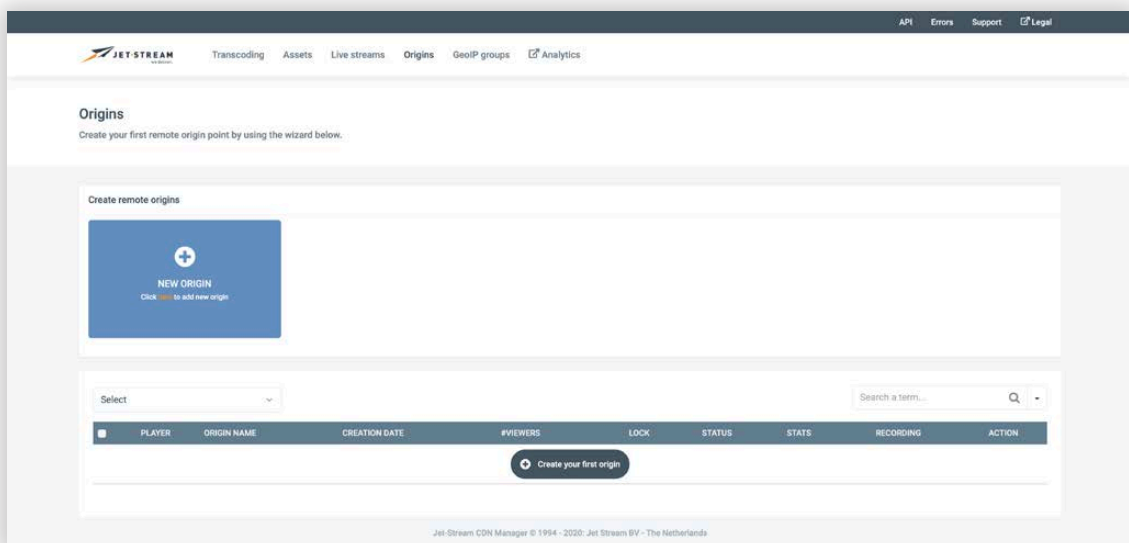
Configure origins in minutes

Connecting your origins to Jet-Stream Airflow Multi CDN is a matter of entering the origin web address and an origin name. That's it. No hassle with caching headers, records or anything. Your origin is immediately available through all CDNs.

You can configure origins redundantly. We do dynamic failover, mid-stream, regardless the active mix of CDNs. You can setup multiple origins, and lock and geo fence each origin individually.



The Origin Wizard dialog box is titled "Origin Wizard" and is labeled "STEP 1/2". It contains four input fields: "Stream name *" with a subtext "Please enter the name of your live stream publishing point", "Primary source location *", "Secondary source location", and "Virtual Hostname". At the bottom, there are two buttons: "Cancel" and "Create Origin Stream".



The screenshot shows the Jet-Stream Origins management interface. The top navigation bar includes "API", "Errors", "Support", and "Legal". The main menu has "Transcoding", "Assets", "Live streams", "Origins", "GeoIP groups", and "Analytics". The "Origins" section is active, with a sub-header "Origins" and a description "Create your first remote origin point by using the wizard below." Below this is a "Create remote origins" section with a blue button labeled "NEW ORIGIN" and a subtext "Click here to add new origin". A search bar is present with the text "Search a term...". Below the search bar is a table with columns: "PLAYER", "ORIGIN NAME", "CREATION DATE", "#VIEWERS", "LOCK", "STATUS", "STATS", "RECORDING", and "ACTION". A "Create your first origin" button is located below the table. The footer text reads "Jet-Stream CDN Manager © 1994 - 2020: Jet Stream BV - The Netherlands".

Stealth Shield

Origin Shielding

CDNs can overload your servers

Multiple CDNs need to retrieve your content. For video, and especially for live video content, this can result in high load on your servers and network.

Jet-Stream integrated origins: free

The Jet-Stream Platform therefore offers integrated Origin Shielding: we offload your origin servers. All CDNs pull content from the Jet-Stream Platform, which will pull it from your origins. Since we have extremely fast connections to the CDNs, your streams will perform all the time.

Thundering Herd live stream protection

Jet-Stream Origin Shields have built-in thundering-herd protection technologies to scale live streams and to protect your servers. Parallel requests for cache misses are recognized. A single request is passed through to the origin. As soon as the data flows in, it flows to all the CDNs and to all the viewers.

Caching transparency

We made sure that our caches and the CDNs caches respect your headers. So you have full control over time to live for vod and live manifests, vod and live segments, and everything else.

Reduce costs and headaches

Origin Shielding drastically minimizes the number of requests, load and traffic; reducing your investments and day to day operational costs.

Intelligent Origins

Content control with the finest granularity.

Intelligent Media Origins

You save money and time by uploading your media assets to Jet-Stream Intelligent Origins. Jet-Stream offers shared and dedicated origin services for live and on-demand streaming and progressive download content such as MP4, MP3, podcasts, images, gifs and all popular media types.

Ultra high performance storage

Your content is stored on redundant storage clusters, optimized for many concurrent parallel video playbacks, guaranteeing high performance for long-tail content. Popular content is automatically served from memory, guaranteeing the best possible performance.



■ Tech meta data 'F1sneakpreview.smil'

File name: F1sneakpreview.smil
File size: 544 B
Bit rate: Multibitrate
Resolution: Multiple resolutions
Duration: 1:01
Type: streaming
Status: ✔

FILENAME	BITRATE	RESOLUTION	TYPE	DURATION	STATUS
F1sneakpreview-1080p.mp4	4.39 Mib/s	1280x720	📺	1:01	✔
F1sneakpreview-360p.mp4	616 Kib/s	568x320	📺	1:01	✔
F1sneakpreview-480p.mp4	1.17 Mib/s	854x480	📺	1:01	✔
F1sneakpreview-720p.mp4	2.29 Mib/s	1280x720	📺	1:01	✔
F1sneakpreview-audio.mp4	64 Kib/s		🎵	1:01	✔
F1sneakpreview-nps		1404x784	📺		✔

OK

Content aware origins

Integrated Origins are content aware: every individual video is analyzed for technical metadata. Every title and stream is a known object. Multiple bit rates, subtitles, and other objects are automatically recognized and presented as one logical object which you can control in whole.

Finest granularity control

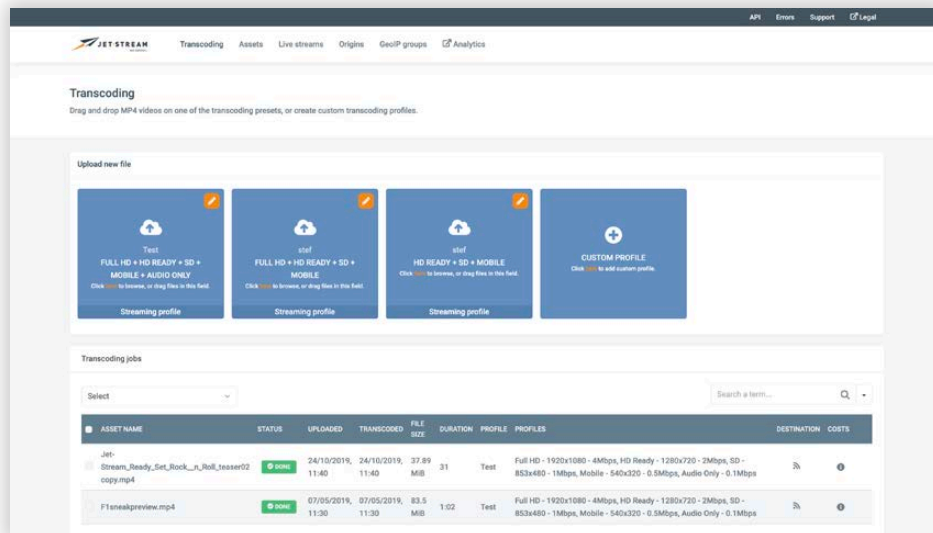
Per individual physical object, logical object, live streams and remote origins you can manage access control, geo fencing and override the MultiCDN Jet-Ai Intelligent Algorithm. You also get live statistics per asset and stream.

Media Asset Management

Asset and livestream metadata is an integrated service. Titles, descriptions and keywords can be imported and exported through the API. Metadata is automatically used by the Jet-Stream Privacy Player.

Real-time Transmuxing

Your live streams and media library are transmuxed in real-time to HLS and DASH adaptive bit rate streaming to your audience at no additional costs.

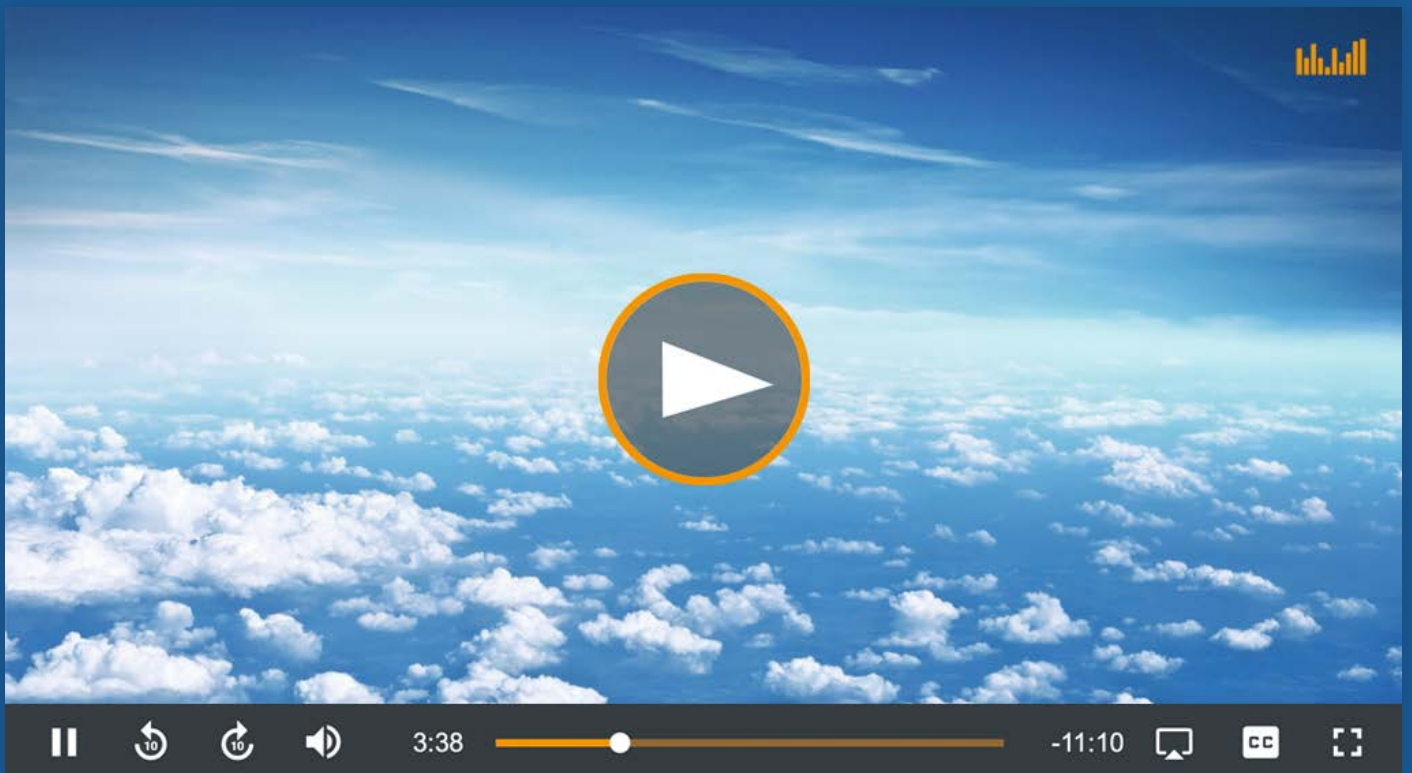


Recording and transcoding

VOD transcoding, live transcoding and live recording are integrated services too and are fully controlled via the API. These services are offered at competitive rates, pay as you go or at discounted committed rates.

Privacy Player Free

Slash publishing costs.



privacy - ultra fast - feature packed - free - unlimited

"We needed to be GDPR compliant. As a bonus we got a faster player and we saved thousands per month by switching to Jet-Stream Player"

The best all-round HTML5 player

Privacy Player is a modern, ultra light and user friendly HTML5 video player that offers your audience a universal media experience, regardless whether they watch your media in their browsers, on tablets or on their smart phones. Copy/paste the iframe in your website and you are ready to go.

Awesome streaming features

Live streaming, vod streaming, dynamic adaptive bit rate streaming, progressive downloads, subtitles, poster images, scroll thumbs, multi-language , Chromecast, Airplay, Picture in Picture: it's all there. Privacy Player is the best allround video player on the market.

No trackers

Did you know that most video players out there contain trackers? They leak data. Jet-Stream Privacy Player does not do any tracking, it respects the privacy of your viewers.

Free with unlimited views

Privacy invasion should never become an earnings model. To prioritize privacy, Jet-Stream bundles Privacy Player for free with every account, without play count limitations.

Save publishing costs

Within a month after introduction, all Jet-Stream customers switched over to the Privacy Player. You immediately save on expensive video player licenses by using the Jet-Stream Platform, and you get a faster full featured player that respects the privacy of your audience.


Don't Pay to Play

Privacy Player Pro

Custom branding, monetization and player interaction API

Privacy Player Pro

Privacy Player Pro is a high end professional HTML5 video player. It is included for free with Broadcaster accounts and is available with an unlimited number of views. Privacy Player Pro offers the same features as Privacy Player Free and adds advertisement, a recommendation engine, 4K, 8K & 360 VR surround video, dynamic branding and interactivity.



Advertisement (2 of 2) 0:34

Custom progress

Volume

Custom controls

Play Pause

seconds Go

Overlays

Station Logo On Off

Interactive overlay Add Remove

Control Bar

- Toggle play/pause button in control bar
- Toggle show hide the controlbar

Contextual Advertising

Monetize your media in a privacy friendly way. Privacy Player Pro is the first commercially available videoplayer in the industry to introduce contextual advertisement. Share context metadata to advertisers and pre-roll their ads without exposing your viewers' personal profile data. Advertisers will still be able to target specific audiences. Contextual advertising the future of video advertising.

Dynamic Branding

Privacy Player Pro lets you fully customize and integrate media in your portals for web and mobile. Use custom colors, change fonts and create your own buttons to offer your audience a seamless brand experience across your websites and portals. You can change the appearance of the player in real-time, while playing.

Interaction API

Control the player from your website. Read out the timing of videos and change the context of your website accordingly: display slides, change colors, insert subtitling and overlay graphics. Use a transcript to search for spoken words in the video and do a realtime search on social media hashtags, and overlay these social posts on the video. Endless creative options.



share your creativity, not your data

Slash TCO by 50%

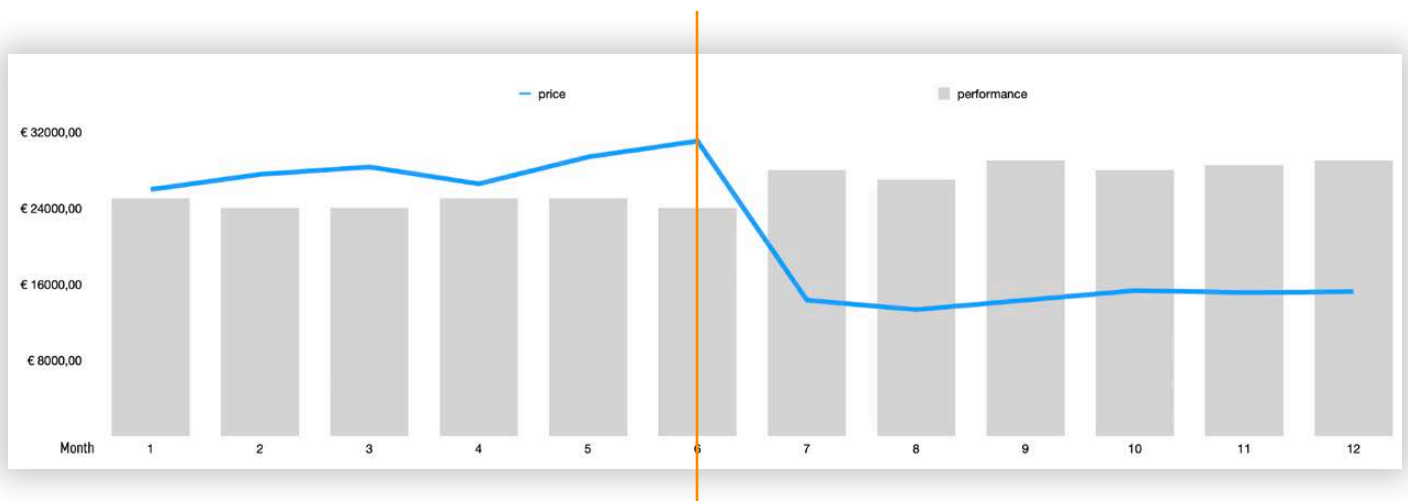
Slash streaming Total Cost of Ownership

Total Cost of Ownership

Streaming traffic volumes are large and fast growing. It is quite easy to focus just on the traffic rates. But what about all the other costs involved? Negotiations, integrations, day to day operation: they add to your total cost of ownership. And these costs can be huge. Instead of decreasing costs, we've only seen other Multi CDN services add complexity and costs. They also reduce you to the lowest common denominator, limiting features.

Jet-Stream Airflow

Airflow reduces overall streaming complexity and costs. Imitated by many, but never outperformed. Since 2015, Jet-Stream Airflow is the leading Multi CDN streaming service in Europe, used by hundreds professional streaming customers. Our historic actual content uptime is >99.999%. We slashed MultiCDN TCO by 50% for our customers. Switch to Airflow, your costs go down and performance goes up:



Join the club: European purchase union

Jet-Stream is helping CDNs to focus what they do best: deliver high volume traffic at high performance. We offload the CDNs commercially, they don't have to offer support, they don't have to provision customers. They don't have to implement, develop and support complex streaming workflow services.

The more volume we can buy from the CDNs together, the more we can help them to cut costs. Which is your benefit too. Join our ever growing community of professional streaming buyers and benefit from lower total cost of ownership.



Build your own CDN

Hybrid CDN, on-premises CDN

Add edges to the CDN mix

Airflow goes beyond Multi-CDN. If you have large volumes and access to affordable networking capacity, you can save money by adding edge servers to the mix of CDNs.

Jet-Stream Edge

Jet-Stream Edge Server is extremely powerful caching software. You can run it on common off the shelves servers, on virtual machines and in clouds, anywhere in the world. Jet-Stream Edge is fully integrated with the Jet-Stream suite. Edges are remotely deployed and active within the hour.



Overflow

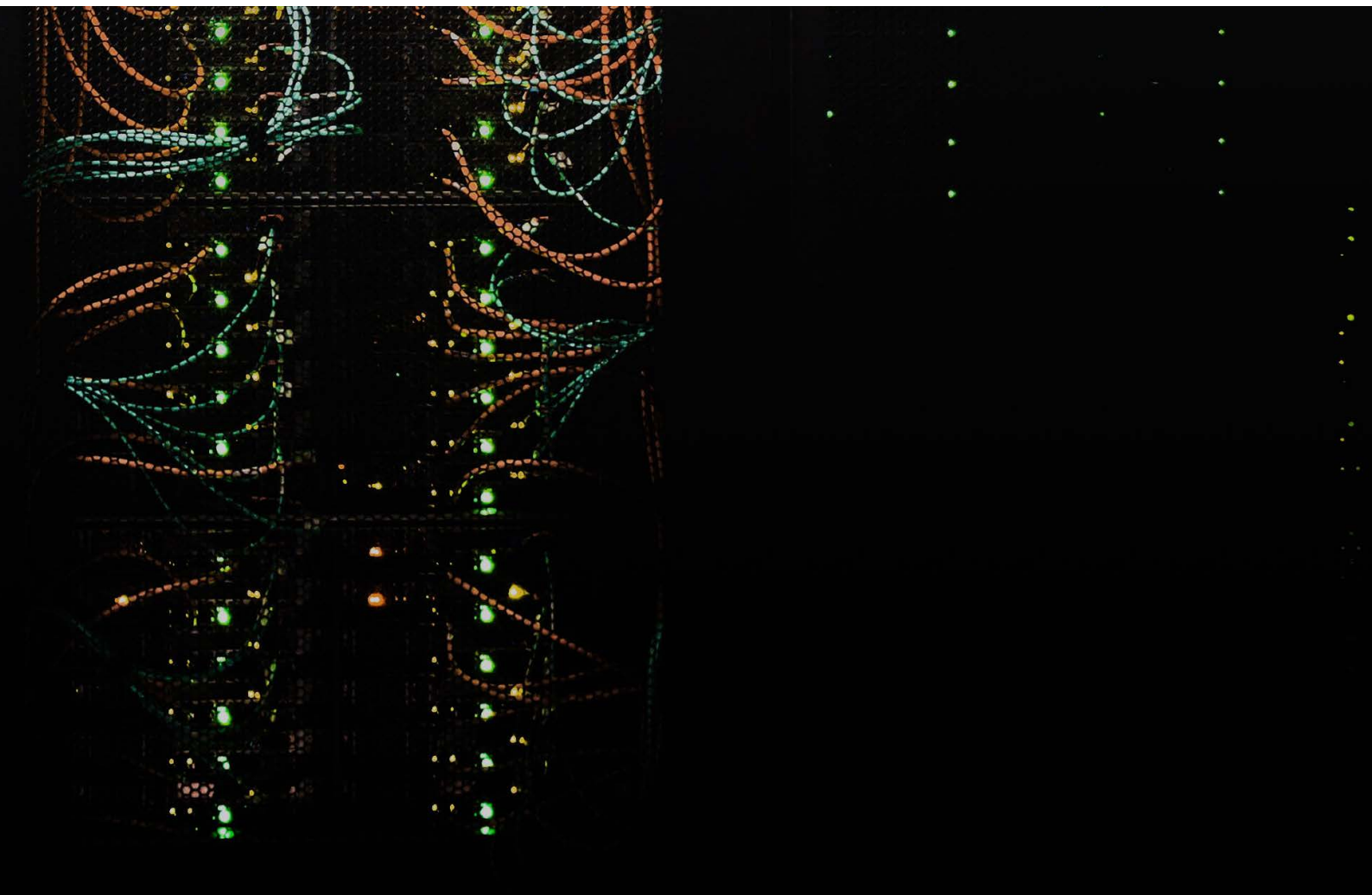
Our tiered architecture lets you serve traffic from your own streaming platform. Sudden peaks are automatically overflowed to a mix of third party CDNs.

Deep Edge

Another popular use case is where a mix of CDNs is used to deliver traffic globally, and additional edge servers are deployed in areas where you can deliver cheaper or better yourself. You can even install deep edges within 5G mobile networks, to offload telecom networks. Airflow can route requests from specific IP-addresses and ranges to specific edge servers and can be learned to recognize other topological parameters to calculate the optimal proximity to CDNs and edges.

Private CDN

We can deploy an entire private on-premises MultiCDN platform in just a matter of days. Start small on the Jet-Stream platform and keep scaling up: conquer the world.



Security

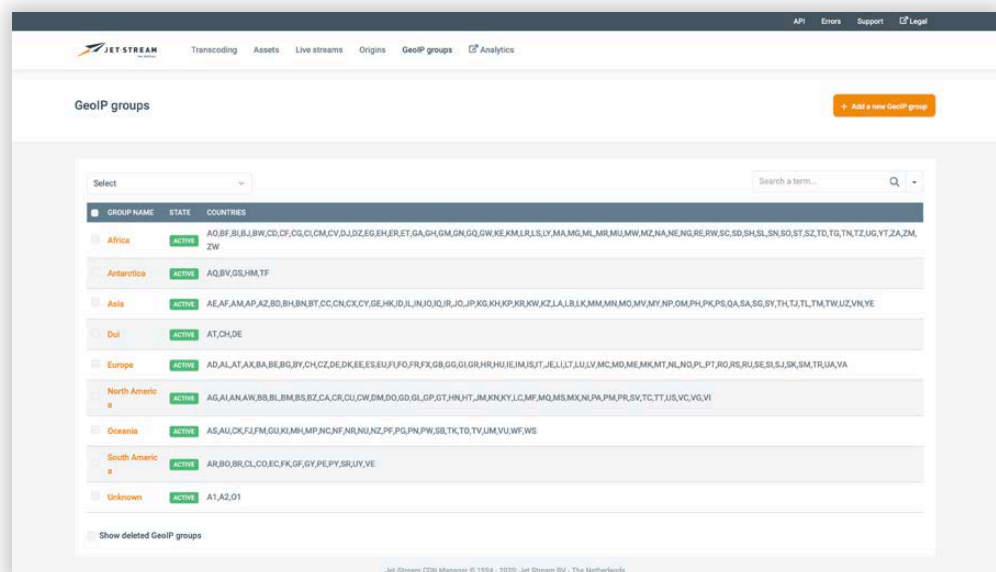
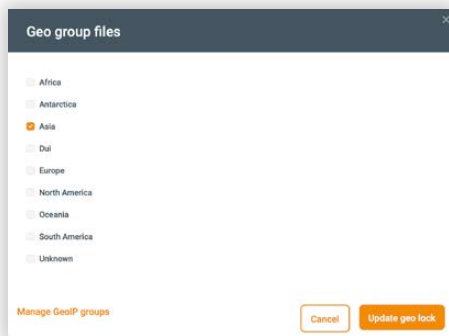
Protect your content, protect your revenues

SSL and DDOS protection

The Jet-Stream Platform is protected against DDOS attacks. We have a strict SSL by default policy, not just for streaming, also for all interfaces and APIs.

CDN independent geo fencing

Geofencing is built into Jet-Stream Airflow Multi CDN. It is real-time configurable per individual title and live stream. You can create and manage your own custom groups of countries. Known VPN services are blacklisted by default.

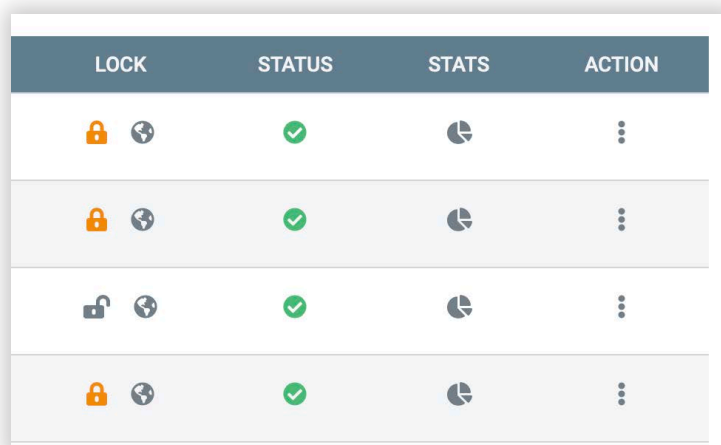






















CDN independent anti-deep linking

The audience cannot bypass our load balancers. Our own servers and most CDNs deny access to content unless a viewer passes through our load balancers first. No cookies required. Per viewer, a unique protected session is created, without affecting caching efficiency.

CDN independent access control

If you turn on access control, you can decide per title, per stream and per play request whether a viewer has rights to access the requested content, or not. Our load balancers will deny access unless you provided a unique token for this specific request. This way you control that your content can only be accessed through your portals, you enable create single-sign-on, or request your audience to sign in or to pay before they get access.



LOCK	STATUS	STATS	ACTION
 			
 			
 			
 			

Protect your earnings model

Geo fencing and enforced access control changes are effective immediately. It keeps your content and your earnings model safe.

DRM agnostic

Encrypt your live streams and the media on your origins. The Jet-Stream platform will transparently cache and deliver the protected content to your audience. You are free to use any DRM origin, DRM enabled media player and DRM licensing service.

Privacy

Privacy, it's the law.

RUM and CDNs collect personal data

Did you know that RUM logs and CDN access logs contain personal data such as ip-addresses? Did you know that this data is often collected without consent? Did you know that it is illegal under European Law (GDPR) to store personal data with US based companies?

No safeguards with US services

Safeguards in standard contractual clauses are overruled by the US Cloud Act, even if there is a EU legal entity, even if the data is stored in the EU zone. Most clouds, CDNs, Multi CDN RUM and DNS services are affected. They do not offer the required safeguards as required by EU laws.



Jet-Stream protects personal data

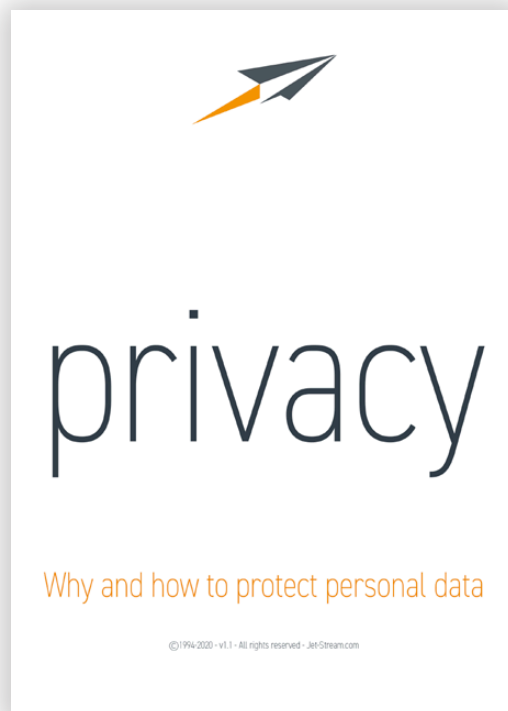
Jet-Stream is a EU company, without any US connection. Our services are hosted on EU territory. Unlike virtually anyone else in the industry, we are not subject to US Law.

Privacy efforts

We have an active pro-privacy, anti-tracking policy. We anonymize access logs. We tuned our algorithm to prioritize EU based CDNs who don't store access logs outside the EU zone. We don't use any trackers. We are pushing the Privacy Player for free to help our customers to protect the privacy of their audience.

Share your creativity, not your data

Protect your audience. It's the right thing to do. And you prevent fines and mass claims. Request our privacy whitepaper from whitepaper@jet-stream.com.



About Jet-Stream

Streaming pioneers

We invented streaming

On November 4 1994, we invented live video streaming. We produced the world's first live stream ever. Although we had just a few frames per second, and just 4 viewers, we started a revolution: can you imagine life without live streaming?

We built the first CDN

In 1996, our live streams became so popular that we overloaded the internet. Sorry. So we built the world's first CDN in 1997 by deploying edge streaming servers with multiple internet service providers and by geo load balancing the audience over the servers. In 1998 we invented active request routing to actively load balance viewers. In these years we conceptualized the fundamentals of today's innovative Multi CDN technologies that power Airflow.





Scale and professionalize the web for streaming

Jet-Stream was founded in 2003 with the mission to scale and professionalize the web for streaming. The first iteration of the integrated Jet-Stream VideoExchange CDN management software was introduced in 2009, both as SaaS and as licensed software. It was the first streaming and CDN platform with a unified interface to manage everything yourself. One year after introduction, the number of customers doubled and Jet-Stream operational costs were slashed by 50%. The technology has been licensed to numerous large telecom operators around the world.

First streaming Multi CDN solution

Jet-Stream Airflow Multi CDN was developed from 2013 and introduced in 2015. Jet-Stream Airflow is used by hundreds professional streaming customers including broadcasters, events, enterprises, sports clubs and video production companies. Jet-Stream continued to modernize its technologies and introduced many new industry firsts such as the Privacy Player.

Trusted by hundreds professional customers

Hundreds loyal and professional European broadcasters, publishers, sports clubs, enterprises, events and brands trust Jet-Stream to provide their core streaming services.

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If you have suggestions to improve this document, feel free to contact us at info@jet-stream.com

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