Brand Safety for OTT/CTV

An Addendum to the 4A's Brand Safety Playbook

Advertiser Protection Bureau

Contents

Introduction

The Brand Safety Playbook was published to create comprehensive guidelines for brand safety across fraud, malware, and content adjacencies, giving marketers the tools needed for safer deployment of digital advertising, and helping brands and agencies devote less time and effort to detect, report, address, and avoid brand safety and suitability risks—and more time to the core remits of performance and brand building.

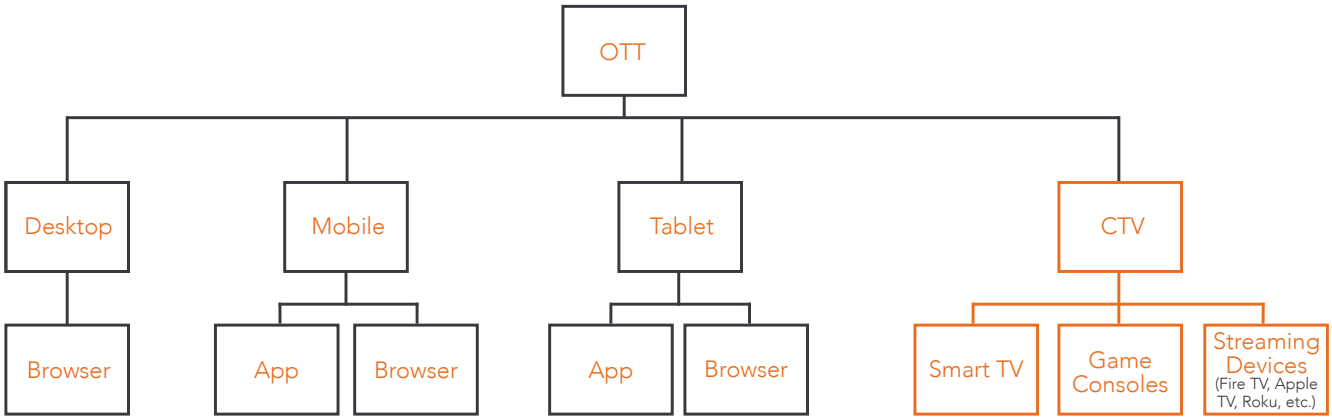
The over-the-top/connected TV (OTT/CTV) advertiser platforms have grown explosively in recent years in both consumer adoption and brand investment. eMarketer forecasts that by the end of 2021, more than 209 million individuals in the U.S. will use OTT video services, up from 193 million in 2017, and 194 million individuals will use CTV, up from 168 million.

This addendum to the Playbook (Published May 2019) explores the OTT/CTV landscape to analyze the state of brand safety and fraud within this growing ecosystem. More importantly, it provides detailed best-practice recommendations to improve safety and fraud assurance.

OTT vs. CTV

The Video Advertising Bureau (VAB) defines OTT as "premium long-form video content that is streamed over the internet through an app or device onto a TV (or PC, tablet, or smartphone) without requiring users to subscribe to a wired cable, telco, or satellite TV service." The VAB defines "connected devices" as internet-streaming players, game consoles, and connected TVs."

This guide primarily focuses on CTV, as this is the environment where measurement capabilities are least developed.



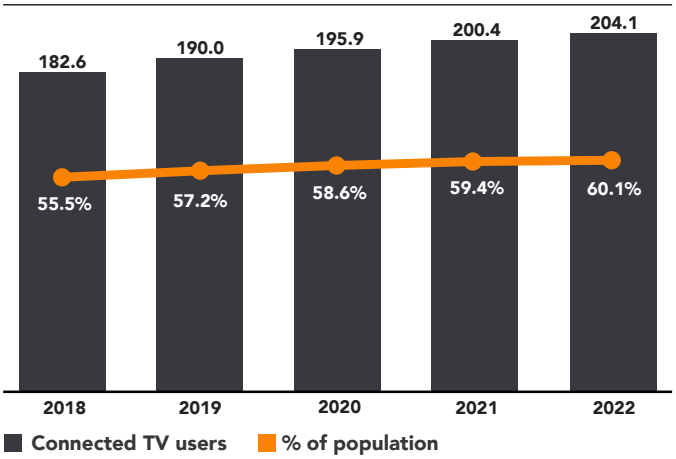
CTV is a subset of OTT inventory delivered via connected TVs and dedicated devices hooked into the big screen.
DoubleVerify

Exponential growth of connected TV

More than half of the U.S. population (58.6%) will watch connected TV in 2020, up from 51.7% in 2017, according to eMarketer. And because the time these viewers spend watching will increase too, the amount of connected TV inventory available to advertisers will proliferate.

U.S. connected TV users, 2018–2022

millions and % of population



Note: Individuals of any age who use the internet through a connected TV at least once per month

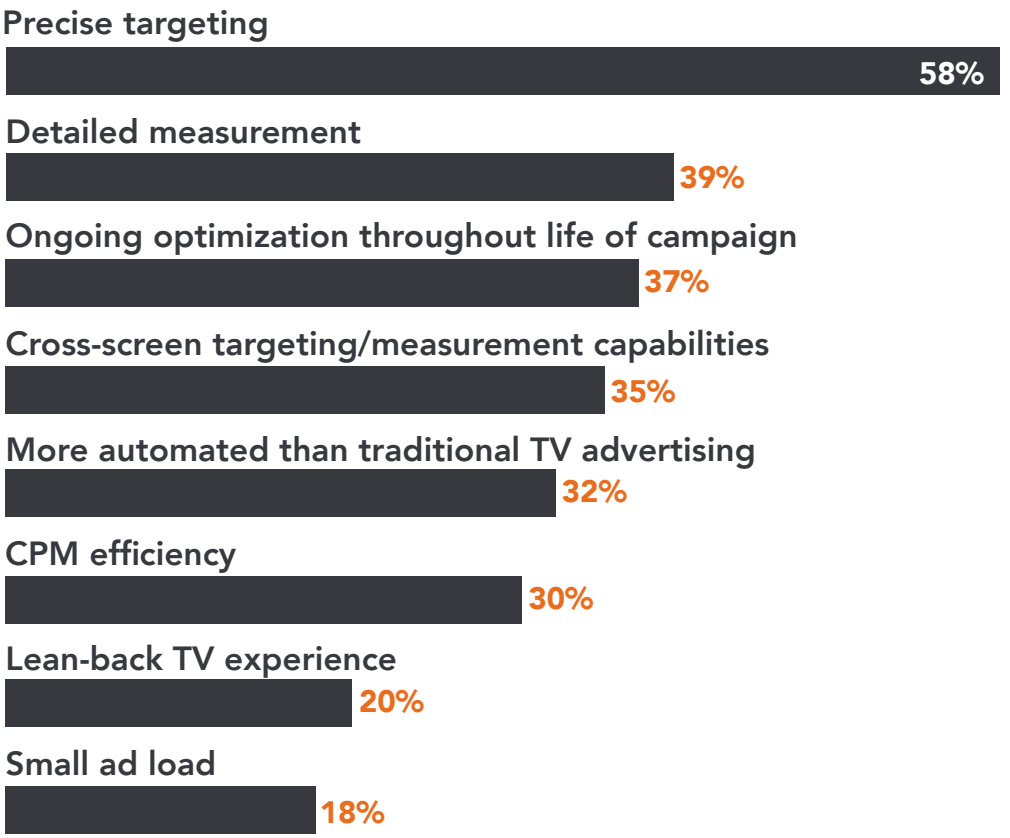
Source: eMarketer, July 2018

Marketers are on board

Marketers cite targeting, optimization, small ad load, and a lean-back TV experience as key factors for growing their investment in CTV.

Leading benefits of OTT/CTV advertising according to U.S. agencies and marketers, Jan. 2018

% of respondents



Note: n=171; respondents chose their top 3
Source: Videology, "Advanced TV Trends" conducted by Advertiser Perceptions, June 26, 2018
eMarketer.com

Challenges

While CTV has been available to advertisers for several years, it has only achieved critical mass within the last few quarters to command the attention of brands and agencies. The space continues to grow rapidly, but measurement and reporting is still in its infancy. Several challenges are unique to this space, including lack of standard definitions, difficulty in measurement of fraud, viewability and brand safety, significant limitations for controlling frequency, and lack of universal measurement and transparency.

Considerations

Fraud and brand safety

In the digital space, fraud has followed digital investment and audience attention. Just as fraud has followed advertisers' increasing spend in mobile, a similar scenario is now playing out in CTV.

Safety challenges OTT/CTV growth

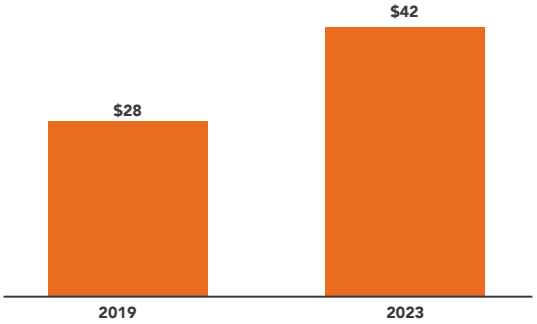
OTT/CTV audiences are high and climbing, with over 80% of U.S. households now equipped with OTT/CTV devices.

Volumes are increasing at double-digit rates. eMarketer estimates 60% volume growth in 2019.

Higher CPMs, a fragmented ecosystem, new technologies, and a lack of widely adopted industry standards, have resulted in an OTT/CTV landscape vulnerable to fraud.

OTT TV ad spending worldwide, 2019 & 2023

in billions



Note: includes fraudulent activities via in-app advertising, mobile and online

Source: Juniper Research, "Future Digital Advertising: Artificial Intelligence & Advertising Fraud 2019–2023" as cited in press release, May 21, 2019
eMarketer.com

Fraud in CTV consists primarily of:

- spoofed domains (pirate sites or other low-quality content masquerading as legitimate publishers)
- spoofed user agents (inventory running on PCs, tablets, or phones masquerading as connected TVs)
- data-center emulators
- bot-generated traffic
- malware-hijacked devices that run invisible ads in the background

Contextual brand safety issues arise in CTV based on contractual non-transparency and misalignment of expectations versus reality. To protect their primary direct-sales channels, many CTV publishers prohibit resellers from reporting on app-level placements for a given campaign.

This practice still exists in digital video and display ad network buys, which can be reported as up to 75% non-transparent based on contractual commitments to publishers.

The situation can be startling, with advertisers' campaigns that had been assumed to be running on premium broadcast-quality apps actually running on apps with politically extreme content, user-generated content (UGC), foreign-origin and foreign-language content, and other low-suitability inventory, such as crimes caught on camera. At the very least, sellers should be offering content categorization aligned with the Interactive Advertising Bureau (IAB) Content Taxonomy and the 4A's Brand Safety Floor Framework.

SSAI

Server-side ad insertion (SSAI) technology, which content owners use to stitch ads into the content stream for a seamless user experience, has created a walled garden environment that makes direct measurement difficult, requiring server-to-server integrations and/or video ad–serving template.

Content owners use SSAI to improve user and advertiser experience in CTV and OTT. SSAI technology combines ad and video content and delivers them as a single stream. SSAI integrations help combat latency, buffering, and disconnects, and prevent ad-blocking.

However, because of how SSAI is processed through a proxy server, it greatly limits the amount of data passed to the ad server or verification vendor. Fraudsters may also use SSAI to hide their robotic inventory; an unsophisticated measurement service may inclusion list the inventory purely because it identifies an SSAI environment. Sophisticated verification vendors may use a combination of signals from the user device, the exchange offering the inventory, and back-end signal analysis to detect fraudulent SSAI environments.

There are no technical standards for SSAI implementation, and no single vendor dominant in this space, which further complicates the task of building compatible verification technology. SSAI presence can generate false positives and negatives for fraud. A false positive could occur when an ad server or verification vendor categorizes all traffic from data centers as invalid when it might be valid traffic routed through a legitimate proxy server. A false negative simply means a vendor fails to identify an impression as invalid, such as inclusion listing SSAI traffic, when it may be disguising fraud.

Viewability

In the digital space, viewability is a trackable measurement that has become table stakes. Since CTV is essentially an in-app environment, JavaScript is largely not present. Therefore, viewability measurement may rely on software-development kit (SDK) integrations. We encourage rapid development of IAB Tech Lab's open-measurement SDK (OMSDK) for CTV to improve universal viewability measurement coverage in CTV.

Frequency

Frequency management has plagued the CTV space for years, and as new players come into the space, it is inevitably getting worse. Given the multiple ways to buy CTV inventory, and the emergence of ad networks and ad aggregators, frequency management at a user level is impossible. This creates high frequencies, resulting in a poor user and advertiser experience. The use of a common, privacy-friendly identifier like IAB Tech Lab's OTT Identifier for Advertising (IFA) would address the frequency-management issue.

Privacy

Privacy compliance with data from CTV should be considered as privacy takes center stage in the digital media narrative. The uncertain legislative environment in the U.S. makes it difficult to build a futureproof approach. With the California Consumer Privacy Act (CCPA) in effect as of Jan. 1, 2020, efforts are coalescing around common standards for consumer identity management.

IAB Tech Lab's OTT IFA Technical Guidelines seek to establish a baseline for privacy-compliant consumer ID access, while private organizations are proposing CTV-specific approaches, such as Tru Optik's Privacy.TV, which envisions bringing consumer disclosures, opt-in/opt-out, and profile correction to the CTV space. A key element to achieving privacy compliance here is that devices would store consumer preferences, enabling data matching and relevant targeting without collecting the data centrally.

Audience and content measurement and transparency

Measurement standardization within CTV is not all created equal. The challenge is the multitude of ways CTV inventory is accessed by buyers: through devices (e.g., Samsung, Roku), apps (e.g., Crackle, Pluto TV), and content aggregators (e.g., Telaria, SpotX). Therefore, measurement partners must be versed in multiple and often proprietary technologies and methods: Amazon devices are coded differently from Roku devices, compared to TV manufacturer devices.

Today, the only uniform measurement across the CTV ecosystem is an impression, regardless of app, platform, or device. However, the measurability of an impression with a campaign's target demographic or third-party verification from one CTV partner to the next is not consistent. Further, content measurement is largely absent in CTV and must be present to allow contextual targeting and avoidance and enable brand-safety measurement and control. Finally, the prevalence of continuous play (where content that may contain ads plays automatically) on OTT and CTV, as well as the incidence of TV Off (where an independently powered CTV device plays content while the screen is off), may affect the accuracy of measurement.

Between the inherent inconsistent design of in-app environments and the broad use of server-side ad insertion, the current measurement landscape is a patchwork of emerging capabilities.

The following three tables, based on a recent 4A's CTV measurement survey, chart the self-reported capabilities of vendors in three categories of ad-tech providers: verification, ad servers, and DSP platforms.

Tables on pages 9-11

Verification Providers

	CHEQ	Comscore	Double Verify	Integral Ad Science	Oracle	Pixalate
MRC accredited OTT impressions	Does not have	Does not have	In progress	Does not have	In progress	Has
MRC accredited OTT SIVT	Does not have	Does not have	In progress	Does not have	Does not have	Has
MRC accredited app SIVT	Does not have	Has	Has	In progress	Has	Has
MRC accredited audience demo	Does not have	Has	Does not have	Does not have	Does not have	Does not have
Existing CTV measurement SDK	Not applicable	Has	Not applicable	Does not have	Does not have	Not applicable
Existing CTV prebid integrations	Does not have	Has	Has	Does not have	Does not have	Has
Apply app-ads.txt	Has	Has	Has	Not applicable	Has	Has
Monitor and report on app exclusion lists	Does not have	Has	Has	Not applicable	Has	Has
Determine legitimate proxy servers	Has	Has	Has	Has	Has	Has
Utilize XFF to minimize false IVT positives	Has	Has	Has	Has	Has	Has
Identify continuous play and TV Off status in the presence of powered OTT devices	Not applicable	Has	Has	Has	Does not have	Has
Deliver reporting at the app ID and series name	Does not have	In progress	In progress	Has	Has	Has
Monitor and report on O&O vs. audience extension inventory	Not applicable	Has	Has	Not applicable	Has	Has
Ability to measure SSAI server-side signals	Has	Not applicable	Has	Has	Has	Has

KEY

Does not have	
Has	
In progress	
Not applicable	

BASED ON SELF-REPORTED RESULTS OF 4A'S CTV MEASUREMENT SURVEY AS OF *10/23/2019*.

Ad Server Providers

	Adform	Google Campaign Manager	Innovid	Sizemek
MRC accredited OTT impressions	Does not have	Does not have	Has	Does not have
MRC accredited OTT SIVT	Does not have	Does not have	Does not have	Does not have
MRC accredited app SIVT	Does not have	Does not have	Does not have	Does not have
MRC accredited audience demo	Does not have	Does not have	Does not have	Does not have
Existing CTV measurement SDK	Does not have	Has	Has	Does not have
Existing CTV prebid integrations	Not applicable	Has	Not applicable	Does not have
Apply app-ads.txt	Has	Has	Does not have	Does not have
Monitor and report on app exclusion lists	Does not have	Has	Does not have	Has
Determine legitimate proxy servers	Has	Has	Has	Does not have
Utilize XFF to minimize false IVT positives	Has	Not applicable	Has	Has
Identify continuous play and TV Off status in the presence of powered OTT devices	Does not have	Has	Has	Does not have
Deliver reporting at the app ID and series name	Has	Has	Has	Has
Monitor and report on O&O vs. audience extension inventory	Does not have	Has	Does not have	Does not have
Ability to measure SSAI server-side signals	Has	Has	Has	Does not have

KEY

Does not have	
Has	
In progress	
Not applicable	

BASED ON SELF-REPORTED RESULTS OF 4A'S CTV MEASUREMENT SURVEY AS OF *10/23/2019*.

DSP Platform Providers

	AppNexus	DV360	MediaMath	The Trade Desk
MRC accredited OTT impressions	Does not have	Does not have	Does not have	Does not have
MRC accredited OTT SIVT	Does not have	Does not have	Does not have	Does not have
MRC accredited app SIVT	Does not have	Does not have	Does not have	Does not have
MRC accredited audience demo	Does not have	Does not have	Does not have	Does not have
Existing CTV measurement SDK	Does not have	Has	Does not have	Does not have
Existing CTV prebid integrations	Has	Has	Has	Has
Apply app-ads.txt	Has	Has	Does not have	Has
Monitor and report on app exclusion lists	Has	Has	Has	Has
Determine legitimate proxy servers	Has	Has	Has	Has
Utilize XFF to minimize false IVT positives	Has	Has	Does not have	Has
Identify continuous play and TV Off status in the presence of powered OTT devices	Does not have	Has	Does not have	Has
Deliver reporting at the app ID and series name	Has	Has	Has	Has
Monitor and report on O&O vs. audience extension inventory	Not applicable	Has	Has	Does not have
Ability to measure SSAI server-side signals	Has	Has	Has	Does not have

KEY

Does not have	
Has	
In progress	
Not applicable	

BASED ON SELF-REPORTED RESULTS OF 4A'S CTV MEASUREMENT SURVEY AS OF *10/23/2019*.

CTV buying models

CTV is primarily bought three ways:

- direct from publishers (e.g., CBSi, NBC, Hulu)
- platform aggregators that attempt to add value through first-party data overlays, including automatic content recognition (e.g., Samsung, Roku, Viant)
- programmatic buying platforms

Brand safety risk is based on inventory transparency, availability of app-inclusion lists, and the level of audience and inventory measurement available for the buy:

Low Risk

Format	Inventory	Measurement
Direct publisher	Premium long form	Impression and verification enabled
Programmatic	Inclusion list premium long form	Impression and verification enabled
Platform O&O	Inclusion list premium long form	Impression and verification enabled

Medium Risk

Format	Inventory	Measurement
Direct publisher	Premium long form	Impression and/or verification unavailable
Direct publisher audience extension	Transparent app list, professional long form/ UGC short form	Impression and verification enabled
Direct publisher audience extension	Transparent app list, professional long form/ UGC short form	Impression and/or verification unavailable
Platform O&O	Transparent app list, professional long form/ UGC short form	Impression and verification enabled
Programmatic	Transparent app list, professional long form/ UGC short form	Impression and verification enabled

High Risk

Format	Inventory	Measurement
Direct publisher audience extension	Transparent app list, professional long form/ UGC short form	Impression and verification unavailable
Platform O&O	Transparent app list, professional long form/ UGC short form	Impression and verification unavailable
Programmatic	Transparent app list, professional long form/ UGC short form	Impression and verification unavailable
Platform audience extension	Transparent app list, professional long form/ UGC short form	Impression and verification unavailable
Platform O&O or programmatic	Non-transparent app list	Impression and verification unavailable

In addition to aligning buying models to a client's preferred risk tolerance profile, buyers should consider a structured approach to evaluating supply partnerships in the CTV space. The following checklist can be used as a guide for comparing potential partners across a wide range of operational parameters.

Evaluation criteria

For platform, programmatic, or premium publisher

Primary business objectives

- Delivery of brand objectives and outcomes
- Depth of audience or inventory integration

Functionality features

- Compatibility with existing video advertising verification platforms
- Completeness, robustness, and quality of the system
- Risks associated with short-term and long-term delivery
- Quantity and scale of available inventory
- Inventory quality (first-party vs. reselling)
- Channel and device focus
- Number for ad formats available
- Global vs. regional player
- Reach and impression volume by market (if global)
- Breakdown of inventory by direct integration, aggregated and bid stream

Buying mechanisms

- Pricing model/option
- Self-serve
- Managed service
- Real-time purchases
- Direct deals guarantees
- Advanced inventory reservation only
- Advanced spot selection or in-flight spot control
- Data and tech costs

Targeting options

- Specific channel
- Specific programming
- Audiences/first-party data segments
- Operating systems
- Device type
- Connection type
- Location
- Language
- Demographics (age, gender, income, etc.)

Brand safety control methods

- Daypart
- Genre level
- Genre plus programming
- Channel
- Methodology to detect ad fraud
- Third-party fraud-detection technology used
- Methodology to block questionable traffic
- Reporting on questionable traffic
- Contextual brand safety measurability available
- Ability to implement inclusion or exclusion lists (in case of programmatic) at a granular level
- Ad verification technologies used or compatible with

Data management methods

- Quality of data-cleansing approach
- Data migration process
- Data protection
- User data authentication and analysis
- Reporting level granularity for agencies and advertisers
- First-party data ingestion (if possible)
- Second- and third-party data partners
- Data servers location

Requirements & certifications

- Certifications and accreditations
- Inventory listing requirements
- Frequency of quality assurance, fraud, and brand safety auditing of partner or inventory provider
- Frequency of fraud and brand safety audits for maintenance
- Process followed to ensure data security and prevent access breach

Quality

- Usability of platforms
- Ability to upload and store creative assets in bulk
- Targeting parameters and controls for user
- Ability to manage multiple tracking pixels
- Batch upload and export functionality
- User-friendly interface to manage day-to-day campaign performance
- Access to a user interface for agency teams
- Performance dashboards, real-time reporting, and responsive design
- Optimization options
- Transparency in cost, inventory, and performance

Resources required

- Thoroughness and timeliness of implementation plans
- Training and adoption support provided
- API Integration support and timeline
- Creative template and spec requirements
- Data, analytics, and tagging process timeline

Summary: CTV brand safety and fraud best practices

Despite the stated concerns, the 4A's APB believes there is positive momentum toward greater transparency and effective measurement in the CTV space. Measurement and verification vendors are achieving Media Rating Council (MRC) accreditation; some have available SDK integrations that can provide app-level transparency and detect fraud. Platform sellers are moving towards transparent reporting, Tier 1 app-inclusion lists, and contractual refund policies. In programmatic, inclusion lists and app-ads.txt deliver inventory quality similar to that of digital video.

Overall, the 4A's APB recommends applying these CTV Brand Safety Best Practices to maximize protection, investment value, and performance in the CTV space:

Apply standard digital best practices

- Apply client's risk tolerance profile to CTV campaign planning specs and CTV buy type selection (direct platform, programmatic).
- Give preference to programmatic inventory enabled with **app-ads.txt**.
- Cross-reference existing agency/client exclusion lists to avoid IP infringement, hate speech, fake news, terrorism, and pornography.
- Avoid audience extension and long-tail "no-name" apps unless 100% transparent tracking and favorable terms and conditions are in place.
- Review request for proposal (RFP), insertion order (IO), and master services agreement (MSA) T&Cs to ensure inventory-reconciliation protections extend to CTV.
- Assess first- and third-party data sets applied by the inventory provider/platform to ensure compliant and appropriate data-collection practices.

Measurement vendor selection

- Consider a dedicated choice for CTV third-party ad-serving and verification, as opposed to defaulting to your standard measurement partners.
- Use verification vendors that at minimum have achieved MRC mobile app Sophisticated Invalid Traffic (SIVT) and Viewability accreditation and are in the process towards OTT accreditation.
- Use measurement and verification vendors that can identify continuous play and TV Off, and use X-Forwarded-For (XFF) to identify legitimate data centers and minimize false positives for Invalid Traffic (IVT).

Inventory source selection

- Focus inventory selection on supply-side platform (SSP) sources and demand-side platform (DSP) partners that integrate with third-party measurement and verification vendors and support full data transparency.
- In the request for information (RFI), specify whether you are looking to buy OTT inventory or specifically CTV inventory.
- Include make-good language in the IO addressing impressions that fall outside of the CTV platform.
- Give preference to SSAI inventory that enables client-side signal collection and announces App ID and Series Name, Server ID, Client ID, and SSAI Vendor name.
- Negotiate for 100% app-level transparency and inclusion list application.

What's next?

As the evolution of CTV continues, we look forward to a continued maturing of the ecosystem, bringing deeper analysis and verification capability, enhanced transparency, and common definitions:

- industry-standard pre-bid filters and blocking
- 100% app-level transparency
- ubiquitous audience reporting
- program-level reporting
- standardized inventory naming convention
- privacy-compliant identity management

Contributors

The 4A's Advertiser Protection Bureau would like to acknowledge the contributions of the following organizations:

- Adform
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- Oracle
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- Xandr

About The 4A's

The 4A's helps empower our members to deliver insightful creativity that drives commerce and influences culture, all while moving the industry forward. We are dedicated to, and vested in, our members' success, just as they are dedicated to helping brands create, distribute, and measure effective and insightful advertising and marketing. We provide community, leadership, advocacy, guidance, and best-in-class training that enable agencies to innovate, evolve, and grow. In 1917, the 4A's was established to promote, advance, and defend the interests of our member agencies, their employees, and the industry at large. After 100 years, we continue to support the evolving needs of our community. Today, the organization serves 600+ member agencies across 1,200 offices, which control more than 85% of total U.S. advertising spend. 4A's Benefits division insures more than 160,000 employees, and its D.C. office advocates for policies that best support a thriving advertising industry. The 4A's Foundation fuels a robust diversity pipeline of talent for its members and the marketing and media industry, fostering the next generation of leaders.

Brand Safety for OTT/CTV

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For more information on the initiative, contact media@4as.org

5 Bryant Park
New York, NY 10018
+1 212.682.2500
4As.org

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