



Marketplace Resources for the Fight against Fraud: Ads.txt, OpenRTB 3.0, Blockchain and Beyond

November 2017

Digital Advertising Supply Chain Challenges

- ▶ 1. Transparency
- 2. Measurement
- ▶ 3. Latency
- 4. Privacy
- 5. Viewability
- ▶ 6. Fraud
- 7. Adverse Context
- ▶ 8. Ad Blocking
- 9. Digital Duopoly
- 10. Fragmentation



It's hard to pinpoint the total impact ad fraud has on display, but we do know it's billions of dollars

\$7.2B to \$12.48B

The range estimates for the cost of ad fraud on the digital display ecosystem worldwide in 2016.

Sources: Association of National Advertisers (ANA) and White Ops, "2015 Bot Baseline: Fraud in Digital Advertising," January 2016; The&Partnership, m/SIX and Adloox, "What Happens Next: How to Reverse the Rising Tide of Ad Fraud 2017," March 2017.

IAB Tech Lab Is Addressing Industry Challenges

Mission: The IAB Technology Laboratory (“Tech Lab”) is a non-profit research and development consortium that produces and provides standards, software, and services to drive growth of an *effective and sustainable global* digital media ecosystem.

Governing Board – *from sell-side to buy-side:*



Partners: IAB (US) & licensees, Ad-ID, CBA, DAA, MRC, TAG, W3C, & more

Tech Lab Strategies & Offerings – The “Why” & “How”

We enable brand & media growth via:

- A transparent, safe, effective supply chain
- Simpler & more consistent measurement
- Better advertising/marketing experiences for consumers (esp. video & native)

...with a focus on mobile & “TV” channel enablement



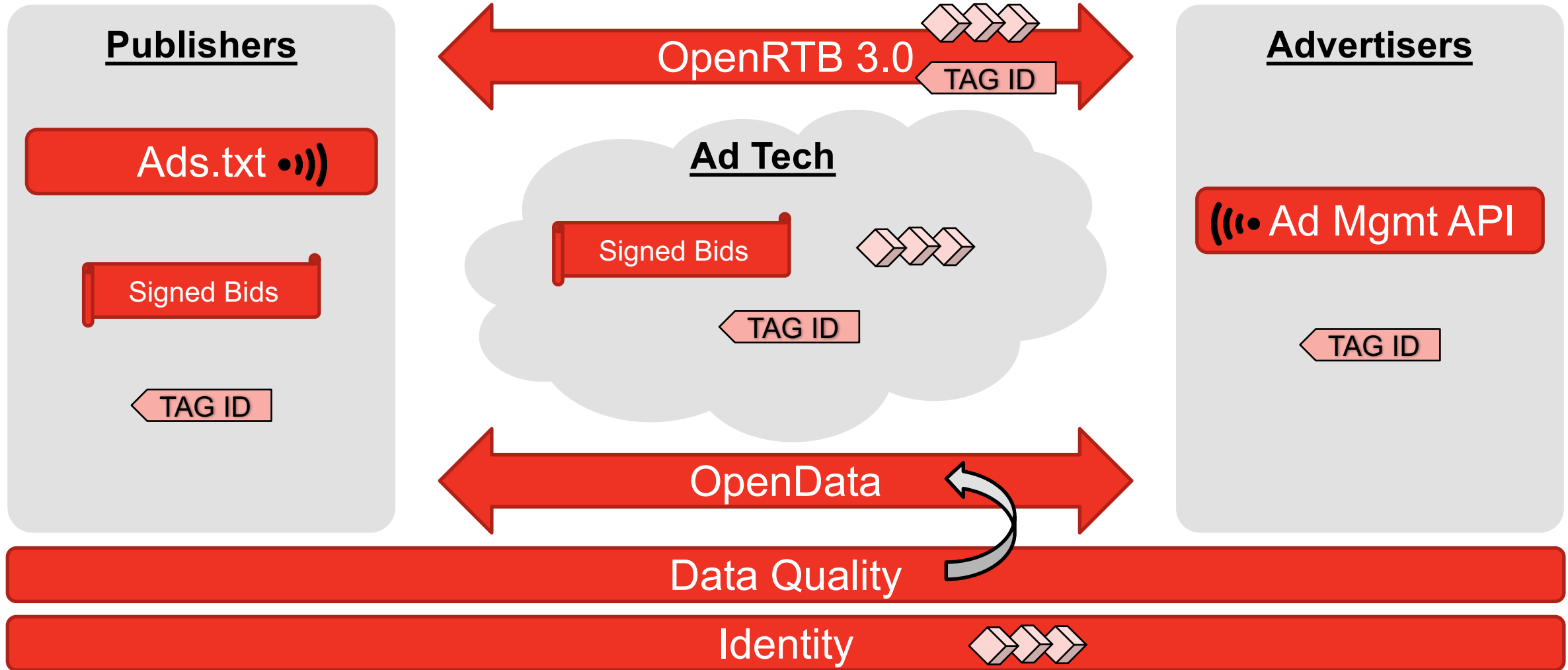
...by providing:

- Standards: Specs, Protocols, Technical Guidelines
- Software: Tools, Code (to support Standards)
- Services: Compliance (for Standards) & Events

Key Initiatives/Products – The “What”

Initiative/Product	Supply Chain	Measurement	Experiences	Channels
Ads.txt (incl. aggregator)	✓			
OpenRTB & Ad Management API	✓		✓ (Ad Mgmt)	
TAG ID & Anti-fraud (supporting role)	✓			
Blockchain Pilots & Standards	✓	?	?	?
Data Quality Standards & Taxonomy	✓	✓	✓	
Identity Standards	✓	✓	✓	
Mobile – MRAID			✓	✓
Video – VAST, “VPAID”, VMAP, OTT IFA		✓ (VAST, IFA)	✓ (VPAID, IFA)	✓
TV – Evolving ATSC Std., File Formats, Metadata				✓
Open Measurement SDK/API		✓		✓
Measurement Standards (incl. Podcast; others with 3MS)		✓		✓
LEAN (incl. Coalition for Better Ads, New Ad Portfolio, AMP)			✓	
Dynamic Content Ads & Native Schemas			✓	
Compliance Programs	✓	✓	✓	✓

IAB Tech Lab Supply Chain Initiatives in Action



Key:  = Blockchain solutions  = Signals sent through supply chain

Advertisers – Current Challenges

- **No Supply Validation**
 - **Site name, URL, ad format, etc are free text fields that may not reflect reality**
 - **Complex supply chains create plausible deniability – your partner may be ethical, but that's hard to assure all the way through the supply chain**
- **Prior efforts**
 - **Payment Chain in OpenRTB 2.5 creates chain of custody for an impression – free text field that may be easy to alter / falsify, needs increased adoption**
 - **ads.txt fights only against domain spoofing**

Publishers – Current Challenges

- **Unknown JavaScript payloads**
 - Security risks
 - Slow performance
- **Unknown creative**
 - Impossible for pub side to police
- **No creative approval standard**
- **Not data-friendly (difficult to comply with GDPR given unknown payload)**
- **Ad blockers (user experience)**

OpenMedia Specification Landscape – Key Interactions



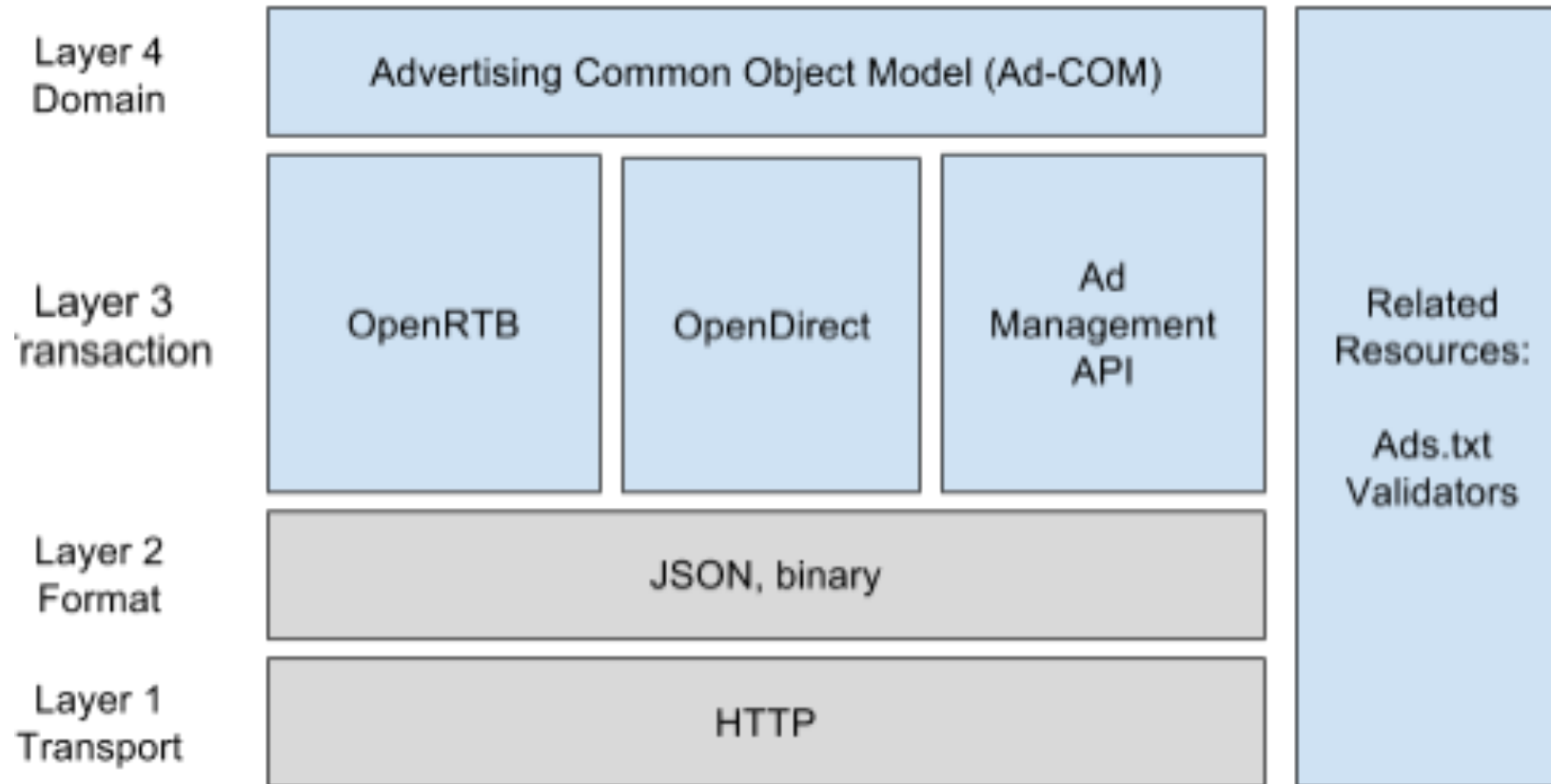
Ads.txt allows publishers to declare explicitly which sellers are authorized to sell publisher's inventory. Buyers can avoid fraudulent inventory.

OpenRTB 3.0 supports trustworthy supply chain: publishers declare allowed data providers & trackers, advertisers can trust the supply chain.

Signed bid requests provides security in supply path, to verify critical impression data such as domain, IP address, Device ID, ad format, and a timestamp of the bid request.

Ad Management API gives advertisers and publishers a standard way to communicate about the creative approval process.

OpenMedia Specification Landscape



Advertisers – Proposed Solutions in OpenMedia

- **Increased transparency and trust**
 - **Authenticated inventory with Signed Bid Requests**
- **Bid requests signed by publisher (or pub ad server/wrapper delegate)**
 - **Key information that shouldn't be changed is signed: domain, IDFA, TID, ad format type**
 - **Standards/libraries to validate signatures (ads.cert)**

Publishers – Proposed Solutions in OpenMedia

- **Deconstructed creative payload and ad object in AdCOM**
- **Standardized Creative Approval (Ad Management API)**
- **Allows Publishers and Publisher platforms to:**
 - **Know creative that will be rendered**
 - **Know and whitelist/blacklist JavaScript that will run**
 - **Allow for GDPR compliance**
- **Ads can be whitelisted by ad blockers**
- **More performant pages**

Ads.txt Adoption

- **~43,000 domains have implemented ads.txt files (Nov. 27)**
- **Ad systems are developing guidance to support publisher adoption**
- **Platforms are starting to support ads.txt-compliant media spend:**
 - **AppNexus**
 - **DoubleClick Bid Manager**
 - **MediaMath**
 - **The Trade Desk**

Trustworthy Accountability Group (TAG)

- **TAG ID Registration**
 - Globally unique business identifier

- **Certifications**
 - Anti-Fraud, Anti-Malware, Anti-Piracy

- **TAG ID used in supply chain protocols**

Future Directions – Blockchain Opportunities

- **Transparency**
 - Fraud
 - Measurement
 - Reconciliation
- **Data security**
 - Control
 - Visibility
 - Ad assets
- **Identity**
 - GDPR
 - Attribution

OpenMedia Solutions – Highlights

Who's Affected	Challenge	Solution	How to Implement
Advertisers & Buyers	Buying fraudulent, misrepresented inventory	Ads.txt	Buyers target authorized inventory sources
	No supply chain security/ validation	Signed bid requests: OpenRTB 3.0	Supply side signs bid requests; security for ad format, IP address, device ID, domain, bundle id, tid
Publishers	Web security risks, slow performance	Deconstructed ad object: Advertising Common Object Model (AdCOM)	Publishers whitelist/blacklist allowed JavaScript payloads for more performant pages
	User Experience	Ad Management API Standard	Buyers and sellers communicate creative approval process; ad tech providers support

IAB Tech Lab Working Groups – Join us!

➤ Our working groups are comprised of the industry's best engineering and product minds. They engage hands-on to develop standards and software to realize Tech Lab's mission and agreed strategies.

- Ad Blocking (incl. LEAN & DEAL)
- Blockchain
- Data Quality Standards
- Digital Video Technical Standards
- Display Creative Guidelines
- Header Tag Task Force
- HTML5 Best Practices
- IAB Dynamic Content Ad Standards
- IAB Flex Ad Standards
- Identity Standards
- Mobile Rich Media Ad Interface Definitions (MRAID)
- Modernizing Measurement Task Force (MMTF)
- MRAID Ads SDK Tester
- OpenData Task Force
- OpenDirect
- Open Measurement
- OpenRTB
- OpenRTB Native
- OpenVV
- OTT
- Podcast
- SafeFrame Implementation
- Taxonomy and Mapping
- TV Convergence Technical Task Force

Please email membership@iabtechlab.com to learn more!

Thank you!
Onto Q&A...

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