



# ***A Developer's Guide to Advertising***

# About me

- Back-end developer at Andrews McMeel Universal
- Ruby on Rails, JavaScript (analytics, advertising)
- Things I like: lifting heavy stuff, cute animals, tasty desserts
- Github: [github.com/lafentres](https://github.com/lafentres)
- Twitter: [@lafentres](https://twitter.com/lafentres)





## **Overview**

- Why?
- Vocabulary
- Programmatic advertising
- Header bidding
- Useful tools
- Problems/misconceptions
- Resources
- Final thoughts/Q&A



**Why should you  
care about  
advertising?**

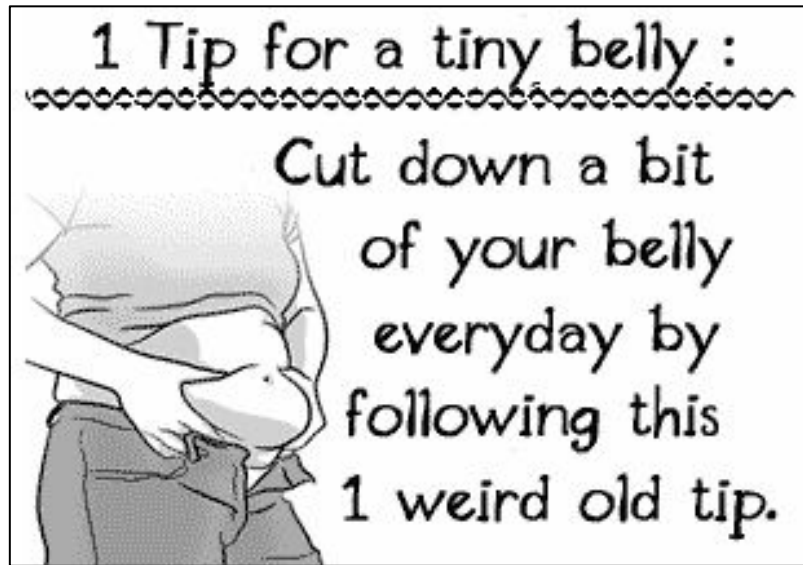


## Banks afraid more copy this

Its forbidden in the US, but still allowed in the U.K.  
(too many made huge gains)

Werd Fre B.V

OPEN >



**START NOW**

### 3 Easy Steps:

- 1) Click 'Start Now'
- 2) Download on our website!
- 3) Get access to your inbox

My Inbox Helper

# **Whenever I Have To Explain A Highly Technical Change or Process To One Of Our Engineers**



<http://happensinadops.com/post/172176185755/whenever-i-have-to-explain-a-highly-technical>



# **MRW A Vendor's Pitch Contains The Phrase "You Just Plug In And It Starts Working" or "We Can Get Set Up In A Couple Minutes"**



<http://happensinadops.com/post/173068450930/mrw-a-vendors-pitch-contains-the-phrase-you-just>

# Whenever A Vendor Brings Along One Of Their Engineers

Their face during the sales pitch is like:



<http://happensinadops.com/post/176093772733/whenever-a-vendor-brings-along-one-of-their>





# **Advertising Vocabulary Primer**

# Ad Inventory

The ad spaces available for advertising on a site



## Breaking Cat News

By Georgia Dunn

Follow

RECTANGLE

Report this ad

## LEADERBOARD

Report this ad

Overview

Comics

About

Our Reporters

Shelter Cats

Breaking Cat News by Georgia Dunn for October 04, 2017



90

279

58

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t

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October 04, 2017

Random



# Ad Impression

Counted when an ad is successfully served/downloaded to a page for display

# Ad Server

Tool used to manage, serve, and track ads for a site

- Many different kinds, DFP/GAM is probably the most common

# Ad Exchange

Digital marketplace where different advertisers can bid on ad inventory from various publishers



# SSP/DSP

Supply side (publisher) platform

Demand side (advertiser) platform

# Viewability

Standard for measuring if an ad impression had a chance to be seen

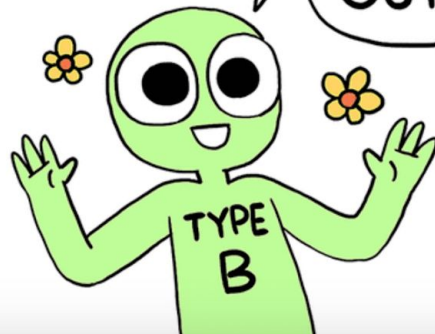
- At least 50% in view for at least 2 seconds

## LEADERBOARD

[Report this ad](#)[Overview](#)[Comics](#)[About](#)

Shen Comix by Shen T for September 19, 2016

WHAT IF EVERYONE  
JUST CHILLED  
OUT?



NO.



4



5



7



RECTANGLE

[Report this ad](#)

Shen Comix

By Shen T

[Follow](#)

RECTANGLE

[Report this ad](#)

IMAGINE IF THE  
WHOLE WORLD  
JUST RELAXED  
A LIL' BIT??



I NEITHER  
CAN NOR  
WANT  
TO.



# ATE/BTE

Above the fold/below the fold

# CPM

Cost per thousand (cost per mille)

- Price paid for every thousand ad impressions served on a site





# **What is programmatic advertising?**

# Programmatic

Automated buying and selling of ad inventory online



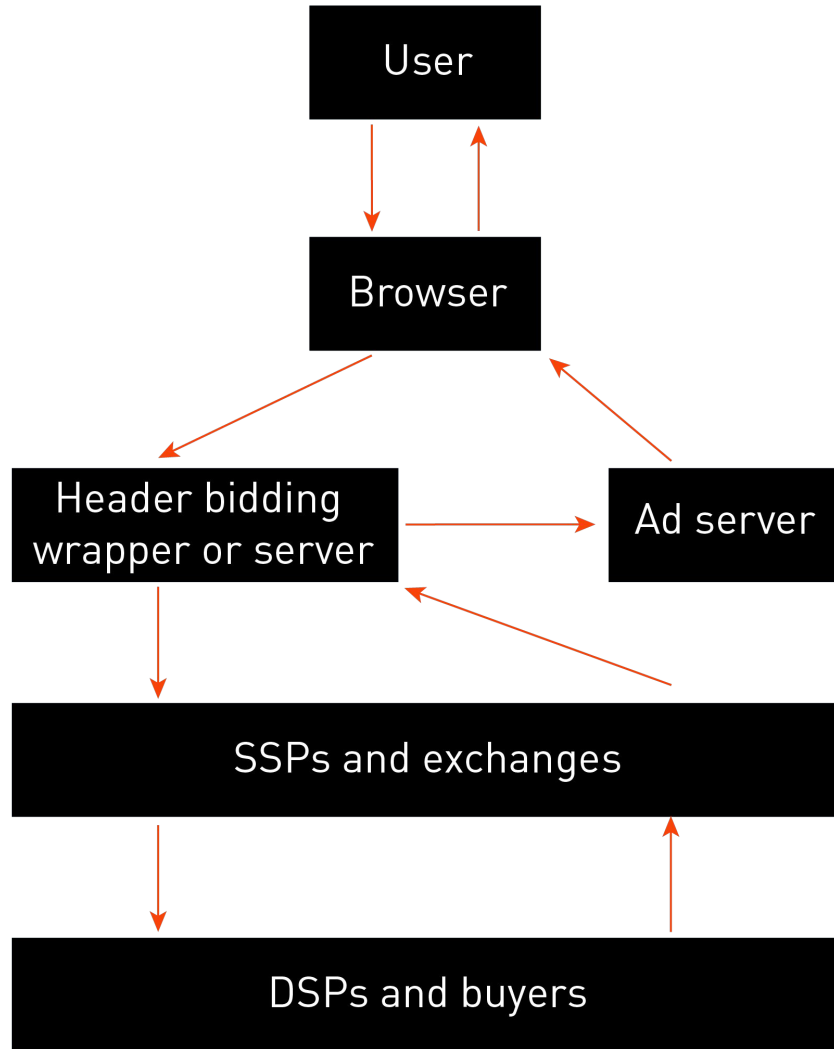
**What is header  
bidding?**

# Header Bidding

Programmatic technique where ad inventory on a site is bid on by multiple ad exchanges at the same time

- Client-side or server-to-server

**How does it  
work?**



# Useful tools





## **Wrappers & S2S Platforms**

- Prebid.js - open-source, well-maintained, documented, decent sized community
- Proprietary wrappers from various ad exchanges
  - Index Exchange, others
- Server to Server
  - Amazon TAM, Prebid, others



## **Browser Dev Tools**

- Network tab
  - Are ad exchanges are getting requests & sending back responses?
  - Is correct information is being passed to ad server?
- Application tab
  - Good for checking (and manipulating cookies)
- Elements
  - Where is this ad coming from?
- Console

pubads

Hide data URLs

All

XHRJSCSSImgMediaFontDocWSManifestOther

2000 ms4000 ms6000 ms8000 ms10000 ms12000 ms14000 ms16000 ms18000 ms20000 ms22000 ms24000 ms26000 ms28000 ms30000 ms32000 ms34000 ms36000 ms

Name

x

Headers

Preview

Response

Timing

DC

pubads\_im...

DC

ads?gdfp\_r...

DC

pubads\_im...

DC

ads?gdfp\_r...

DC

ads?gdfp\_r...

DC

view?xai=A...

DC

view?xai=A...

impl: fif

adsid: AKATW24nF56aHxtPu8-nw\_w5o75VeToT5JGmzHTeSEJ-NTe8aT27j7ty24LEb8Q5PbNCiXfWyMUDSZQ6TD9teXMwyqwaH4355w

jar: 2019-01-31-21

eid: 21061591,21062377,21062722,21062833

vrg: 299

guci: 2.2.0.0.2.2.0.0

plat: 1:32776,2:32776

sc: 1

sfv: 1-0-31

iu: /19196947/gocomics.com/comic/ot

sz: 970x90|728x90

scp: fcode=ot&pos=top&pv=21&channel=b&amznbid=2&amznp=2&hb\_format\_ix=banner&hb\_source\_ix=client&hb\_size\_ix=728x90&hb\_pb\_ix=0.08&hb\_adid\_ix=44dc021bae6f93&hb\_bidder\_ix=ix&hb\_format\_openx=

banner&hb\_source\_openx=client&hb\_size\_openx=728x90&hb\_pb\_openx=0.18&hb\_adid\_openx=728420971f4f21&hb\_bidder\_openx=openx&hb\_format\_rubicon=banner&hb\_source\_rubicon=client&hb\_size\_rubicon=

728x90&hb\_pb\_rubicon=0.08&hb\_adid\_rubicon=13203c0e015a7a3&hb\_bidder\_rubicon=rubicon&hb\_format=banner&hb\_source=client&hb\_size=728x90&hb\_pb=0.18&hb\_adid=728420971f4f21&hb\_bidder=openx

eri: 1

cookie: ID=ea662083534f77db:T=1541710593:S=ALNI\_MZI\_A4xoxH8aoG8uHsNzieAN0mUUQ

bc: 15

abxe: 1

lmt: 1548970406

dt: 1548970406790

dlt: 1548970405355

idt: 201

frm: 20

biw: 1440

bih: 335

oid: 3

adx: 398

ady: 105

7 / 193 requests | 2...



# When A Client Has IAS, Moat, and DBM Pixels On The Same Creative

What the network tab looks like:



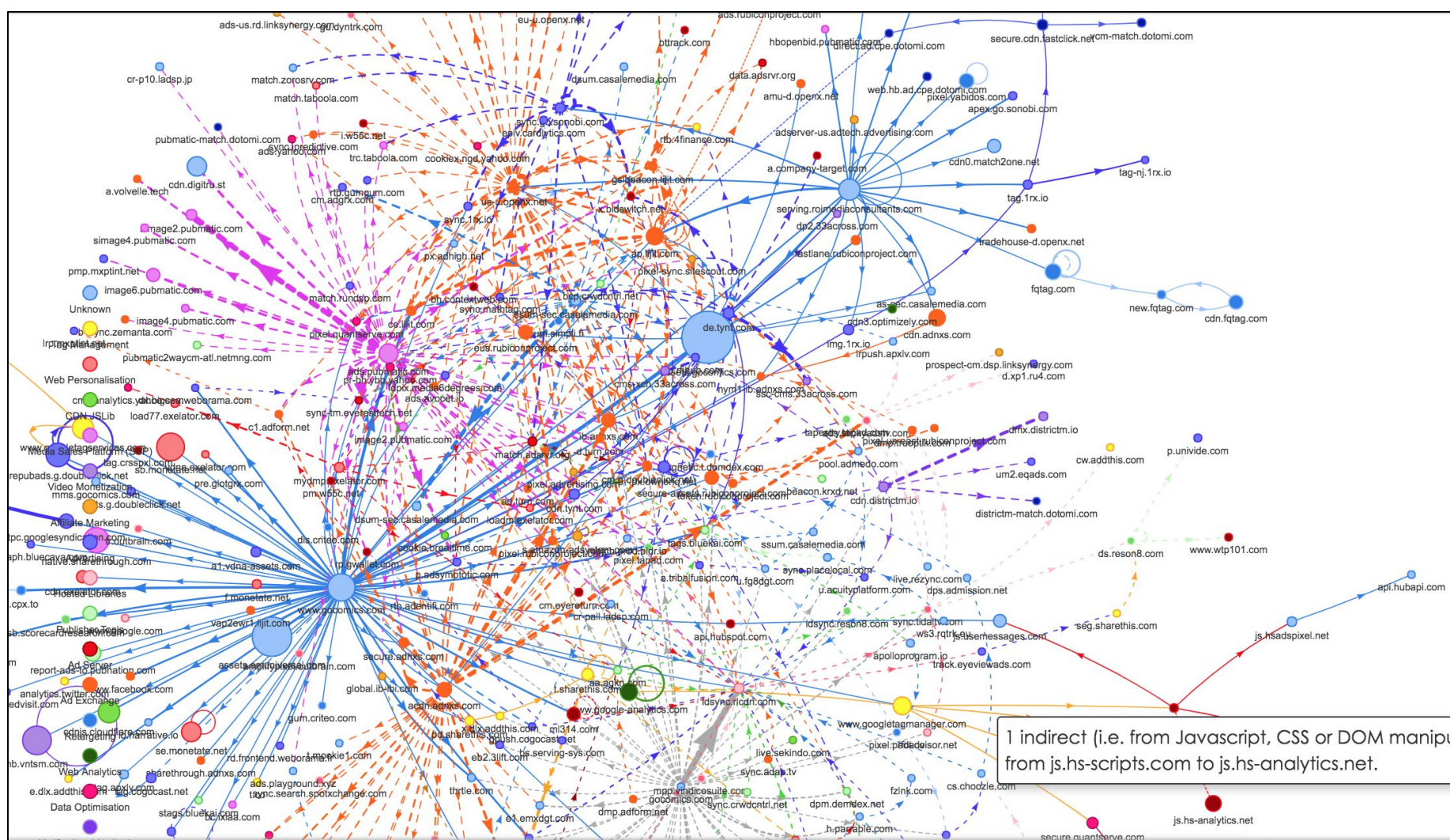
<http://happensinadops.com/post/179351739944/when-a-client-has-ias-moat-and-dbm-pixels-on-the>



## **Performance testing**

- Performance tab in dev tools
- Request Map Generator
- Webpagetest.org
  - Can run multiple tests at the same time and analyze cumulative results
- Other similar tools:
  - GTMetrix, Pingdom Tools







## **Ad Quality**

- Ad scanning and blocking
  - Confiant, Geoedge, The Media Trust
- “Report this ad” links
  - PubNation or similar
- Charles or Fiddler (web debugging proxy)
  - Useful for tracking down malvertising, particularly redirect ads
  - Mobile hotspot will be helpful if trying to track down mobile redirects

## **Browser Extensions**

- Browser extensions:
  - Cookie modifier
    - EditThisCookie (Chrome)
  - Ad blocker
  - User agent switcher
    - User Agent Switcher for Chrome
  - AdWizard by PubLift (Chrome)
  - Viewability Monitor (Chrome)



## **Various other tools**

- Things to implement:
  - Support for A/B testing
  - Static testing pages
  - Test mode
  - Ad server configuration generator
  - Easy way to analyze ad config
  - Lazy loading and ad refresh
    - Intersection Observer



# **Problems & misconceptions**

**Why do sites ask me to  
turn off my ad blocker?  
I never click on ads.**

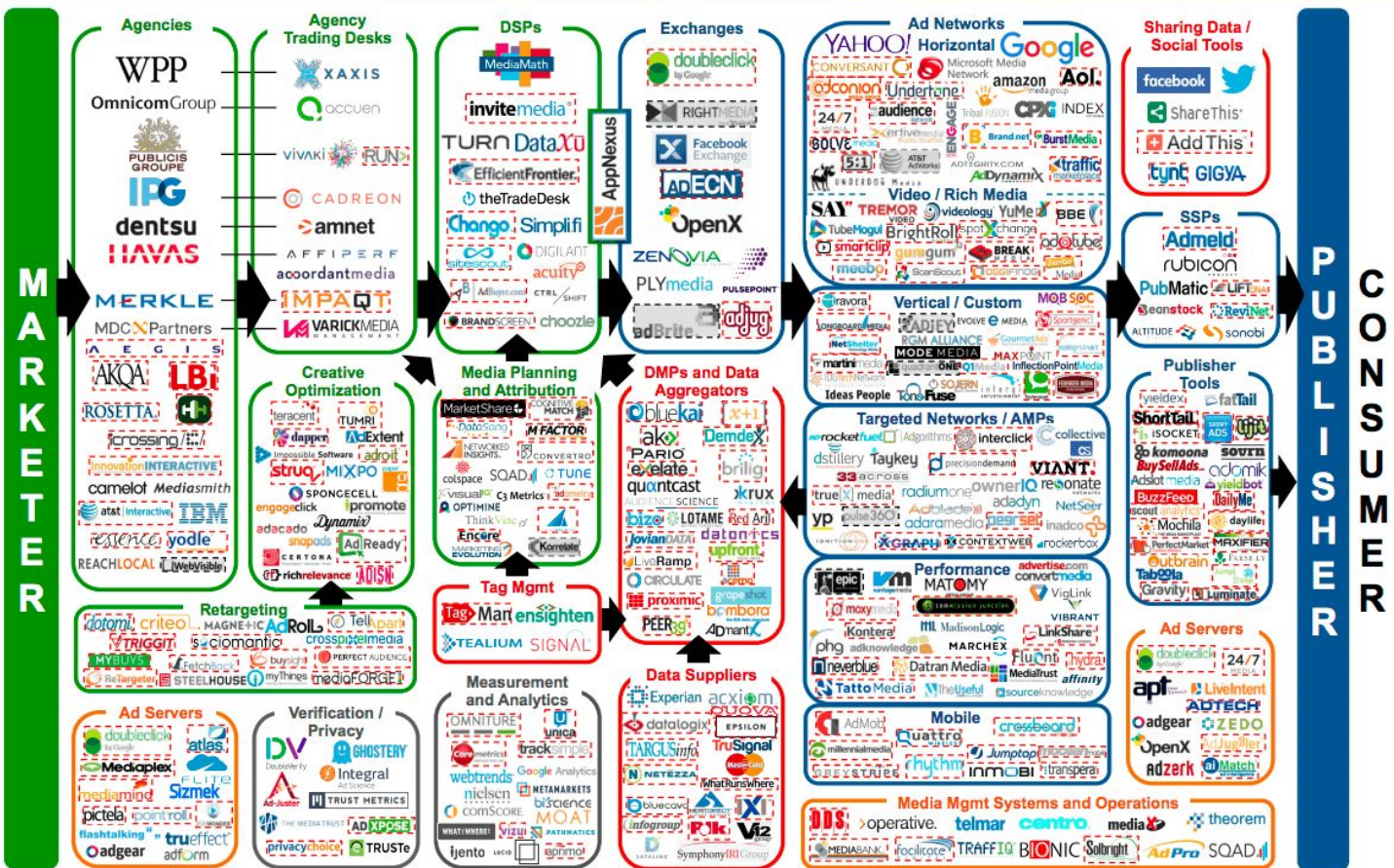
**Why don't sites stop  
serving those sketchy  
redirect ads?**



**Why can't sites let me  
choose what advertisers  
I want to see?**



# DISPLAY LUMAscape



Denotes acquired company

Denotes shuttered company

© LUMA Partners LLC 2016

# **MRW I'm On My Fourth GDPR Call This Month And The End Result Is Still "We're Waiting To See What Other Companies Do"**



<http://happensinadops.com/post/173269410505/mrw-im-on-my-fourth-gdpr-call-this-month-and-the>

# Resources

**AdOps subreddit and Slack:** <https://www.reddit.com/r/adops/>

**Prebid:** <http://prebid.org/>

**Google:** <https://developers.google.com/doubleclick-gpt/reference>

**IAB:** <https://www.iab.com/>

**Digiday:** <https://digiday.com/>

**AdExchanger:** <https://adexchanger.com/>

**Ad Week:** <https://www.adweek.com/>

**Happens In Ad Ops:** <http://happensinadops.com/>

**Google Publisher U:** <https://publisheruniversity.withgoogle.com>

# Final Thoughts

# Questions?

**Github:** [github.com/lafentres](https://github.com/lafentres)

**Twitter:** [@lafentres](https://twitter.com/lafentres)