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Exchange Bidding Update
(Audience: gTech Buy-side Support)

go/jedi-update

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PTX0507
1:23-cv-00108

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Outline

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- Q4 User Group Survey: 21/40 pubs have implemented HB, 9/40 considering (more details in appendix)
- Publishers gave feedback that existing DRX solutions such as Enhanced Dynamic Allocation (EDA) or DFP First Look (DFL) does not address their need to increase yield with multiple exchanges
- EDA only allows average prices for other exchanges/SSPs
- DFL only allows remarketers to compete in the auction

One Sentence Definition

Exchange Bidding in Dynamic Allocation allows non-AdX exchanges to access and purchase DFP publisher inventory via AdX piping.

Why We Are Doing This?

Historically publishers have accessed non-AdX exchanges by setting up fixed-price Line Items in DFP.

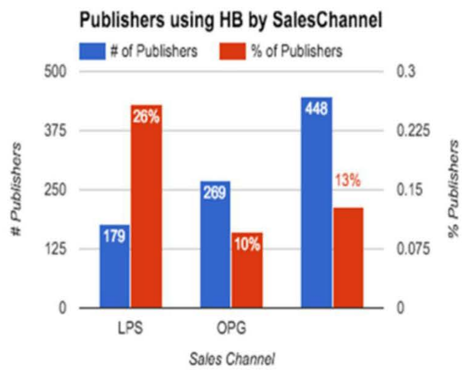
It turns out that getting **per-query bids from exchanges *dramatically increases yield***, so pubs are clamouring for this functionality.

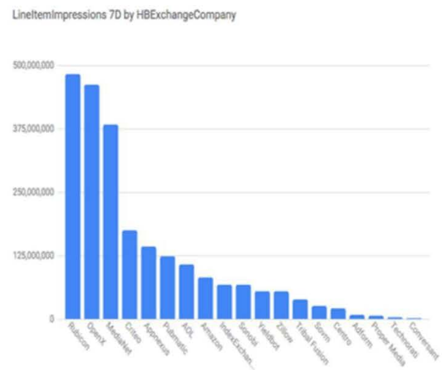
"Header bidding" is a DFP hack that makes this possible and has gained rapid adoption despite shortcomings (latency, difficult to set up, billing discrepancies).

Exchange Bidding allows DFP publishers to get per-query bids from non-AdX exchanges without the hack.

What If We Don't Do This?

1 If we do nothing, pubs will adopt header bidding en masse by EOY 2016.





- 26% of our LPS publishers already do header bidding
- Rubicon & OpenX lead the way; aggressively promoting HB & real-time price competition
- AppNexus wants to make HB an IAB standard (see prebid.js)

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Id	Date	Text
1	03/15/2016 20:30:03	Is there a way to better illustrate that these graphs indicate header bidding by these pubs?

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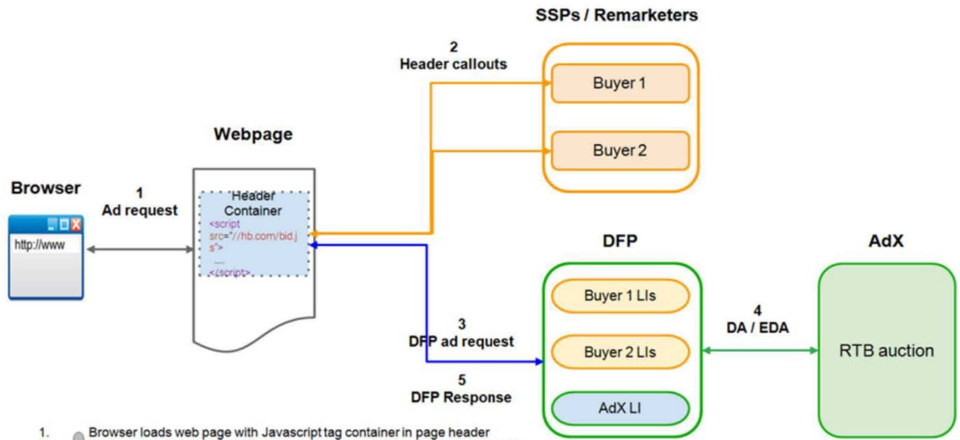
How Does Header Bidding Work?

Header bidding allows pubs to get a real-time price signal before allocating an impression to their ad server



1. Browser loads web page with Javascript tag container in page header
2. Header container makes callouts to 3p buyers to fetch real-time prices (rtp)
3. Header container makes a DFP ad request with the highest price set as key-value targeting for 3p buyer lineitem (LI)
4. DFP matches 3p buyer LI and calls AdX via EDA with the reserve price set to "valueCPM" of matching 3p buyer LI; AdX wins if it beats the reserve price, otherwise 3p buyer LI containing 3PAS creative wins
5. DFP returns highest paying ad to header container

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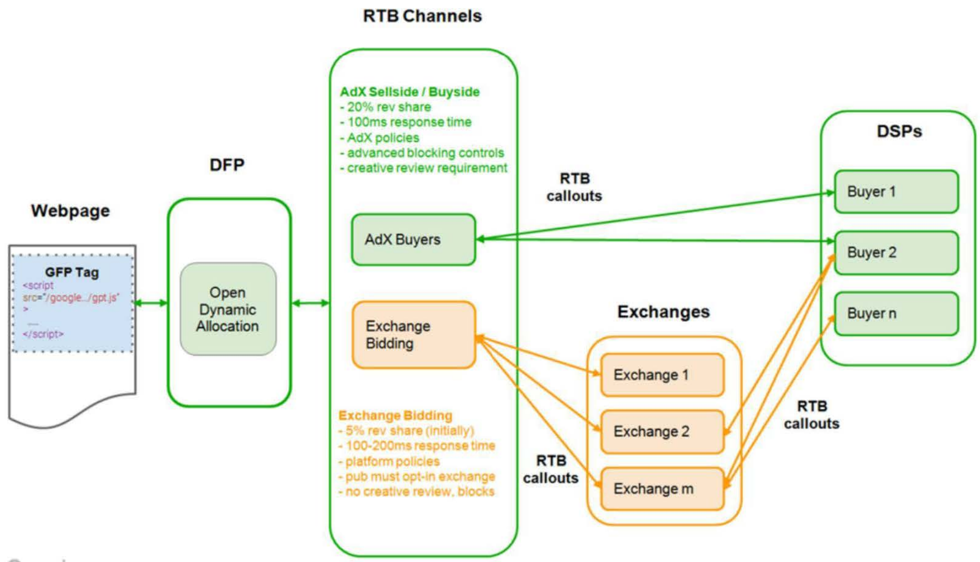
How Exchange Bidding Works

Green = exists today, Orange = new product



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Customers

For the POC, we plan to have 2-3 exchanges and 5-10 publishers.

Exchanges:

1. Index Exchange
2. OpenX
3. Pubmatic

Publishers:

1. Hearst
2. IAC - About.com
3. IAC - Match.com
4. IAC Search & Media
5. Meredith Corporation
6. Trulia / Zillow

OpenRTB

We will support four versions of RTB:

1. AdX standard protocol with Protobuf encoding (no QPS limit)
2. OpenRTB 2.3 protocol with Protobuf encoding (no QPS limit)
3. OpenRTB 2.3 protocol with JSON encoding (5k QPS account limit)
4. OpenRTB 2.2 protocol with JSON encoding (5k QPS account limit)

Exchanges will likely want to implement OpenRTB.

OpenRTB protocol
OpenRTB extensions
OpenRTB FAQs

Onboarding Flow for Exchanges

- Kick-off call
- Contract
- Account creation/whitelist
- Convert account type to demand syndication (Eng/myl@)
- Disable bid data sharing in AdX UI
- Ensure selective callouts is not enabled in rtbkeys
- *Optional:* configure cookie match or pixel push in rtbkeys
- Configure bidder endpoints and max QPS in rtbkeys
- Create match anything Display pretargeting config with max budget
- Communicate to exchange which publisher is offering inventory
- Upon exchange approval, update publisher config file to opt-in exchange
- Publisher callouts sent to exchange
- Monitor callouts & responses - move from testing mode to live when ready
- The fun begins...

Some Key Differences for Proof of Concept*

- Different contract than the current AdX buyer contract
- No GDN certification necessary
- Exchange Bidding exchanges are not visible to publishers in AdX sell-side UI
- No AdX creative verification, relying on DoubleClick platform policies
- No filtering / publisher blocks
- No AdX UI access (no RTB Breakout, RTB Graphs, Pretargeting, Query Tool, etc.) for POC
- No AdX API access for POC
- No Google Cloud Storage (no CSV Performance Reports, Snippet Status Reports, etc.)
- No Data Transfer files
- No selective callouts / efficient callouts
- No real-time feedback
- No video, no mobile app, no deals (only supporting display desktop & mobile web)
- Many bid request fields redacted (language, verticals, allowed vendors, viewability, etc.)
- No Google click macro required but strongly recommended
- Will likely implement OpenRTB
- Latency will be measured at 100ms but we have flexibility to increase threshold

*** subject to change in future versions**

Potential Issues

2

1. **Bad creatives**
   - How to identify creatives are from Exchange Bidding?
   - Dealing with creatives that are deemed as undesirable by the publisher
   - Dealing with creatives that are violating some sort of policy/legal (malware, piracy)

2. **Reporting**
   - Manually pull/provide performance reports for exchanges and publishers
   - Manually pull/provide RTB graphs / bidder performance data for exchanges
   - Dealing with discrepancies with impressions, spend, other metrics

3. **Non-transactions**
   - No callouts from publisher
   - No bids from exchange

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Id	Date	Text
2	03/15/2016 20:33:43	Shouldn't discrepancies stuff be resolved to an extent once Demand Syndication partners have access to QT in Q2?

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Current Status

Code is ready. 1 exchange + 4 publishers are live

3 exchanges and 6 publishers confirmed for POC.

Exchanges (Buyers):
IndexExchange signed 3/24
PubMatic signed 3/23
Waiting on OpenX to sign

Publishers:
Hearst, Meredith, and About.com signed 3/18

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Rollout Plan

V0 / POC: Through End of Q1

- 2-3 exchanges, 5-10 publishers
- no UI, no API, display only

V0.9 / Alpha: Through End of Q2

- expand to 4-5 exchanges (including Rubicon)
- announcement at AdExchanger Programmatic I/O (April)
- expose some portions of UI (RTB Breakout, Graphs, QT, Billing, Settings)
- limited API for pretargeting config creation
- extend OpenRTB support
- consider extending latency thresholds
- reactive spot checking of creatives

Rollout Plan (cont.)

V1 / Beta: Post Q2
- native support
- internal dashboard
- client access (maybe)
- pretargeting UI (maybe)
- announcements at IAB Programmatic Marketplace & AdMonsters events

V2+ : TBD/2017?
- video support
- mobile app support
- cookie matching alternatives
- chain of custody

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Resources

go/jedi-prd (buy-side & sell-side PRD)

- go/jedi-poc (Proof of concept)
- go/jedi-alpha (Alpha)
- go/jedi-beta (Beta)

go/jedi-eng (Eng rollout plan)
go/jedi-comms (buy & sell comms)
go/jedi-faq (buy-side onboarding FAQs)
go/jedi-buyers (buy-side pipeline)
go/jedi-sellers (sell-side pipeline)
go/jedi-policy (platform policies)
go/jedi-marketing (marketing plan)

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Questions?