The Big Picture

The Big Picture: How It All Works

The Impression Bus and Tags

The impression bus is the heart of Xandr's platform. It is a server cluster that processes ad requests, feeds data to members, conducts auctions, returns ads to the publishers, keeps track of billing and usage, returns auction-result data, and enforces quality standards. At the ad call, the impression bus receives a unique user ID and additional page information.

Even if the inventory is tagged with a third-party tag, all inventory is associated with a unique TinyTag ID that maps to tag data stored server side. If a seller uses Xandr tags on their pages, once the tag is in place, all relevant details can be modified without having to re-tag the page. Simply add or change information about that tag within Xandr's platform.

The impression bus will also send each bidder a Pixel Request. A Pixel Request creates a simple way to synchronize your user IDs and metadata with the Xandr user IDs and data.

With TinyTag and the Pixel Request, the impression bus will send your bidder the appropriate user and page information.

The Impression Bus Holds an Auction

When an ad call from one of the Xandr tags or from an Xandr supply partner hits the impression bus, we review the content and send a bid request to the various bidders on the Xandr cloud. The bid request will include the content categorization, page information, user information, and possibly a reserve price and reserve creative.

Data providers integrated on our cloud recognize the user ID and can input any information they may have on that specific ID and will pass the user data to bidders that have the rights to that information. The bidders then evaluate the ad call on behalf of their advertisers and return a bid value to the impression bus.

For a closer look at the auction process, please see the Auction Overview.

> Xandr does not allow bids greater than $999 CPM. Any bids over $999 CPM (or effective CPM for CPA/CPC bids) will be reduced to $999 CPM.

Serving the Impression

The impression is served in one of these ways:

- **Find Highest Bid and Serve Immediately:** Xandr's impression bus determines the highest bidder and will serve the winning bidder's creative as dictated in the bidder response.

- **Highest Bid Wins if It Beats Reserve Price:** If a reserve price is passed via a Xandr ad tag, the impression bus passes this price as well as the other ad call information to all bidders. Bidders respond with a bid value and creative ID, and the highest bid that beats the reserve price will serve its creative. If no bid beats the reserve price, the impression bus will pass the ad call on to a third-party system.

- **Send Highest Bid to Third Party:** The ad call is directed to the Xandr impression bus first. The impression bus holds an auction as usual among its bidders and then passes the highest bid on to a third-party system to decide how to fill the ad call. Only if the highest Xandr bid is chosen as the winner will the ad call be passed back to Xandr, where the impression us will serve the winning bidder's creative.

Auction Postmortem

One of the main problems with working in a closed advertising ecosystem is that it is difficult for bidders to understand why they won or lost an impression. If you bid $2.00 for a car buyer on nytimes.com/autos and consistently lose, what action should you take? Are you being outbid by $0.05 or $5.00? If you are selling inventory, which user segments are driving your CPMs? This crucial information will be passed to your bidder

via Notify Request and the Reporting User Interface.

Couple this with full reporting and API support, and you have all the tools you need to make informed and powerful decisions for your clients.

End Results

- Optimized ad delivery by leveraging the low-latency cloud computing environment
- Brand control and quality
- Full control over CPMs; publishers can decide whether or not to accept the winning bid
- Independent platform allowing deep integration with technologies, optimization engines, and bidders
- Increase the number of high-value users for your clients while decreasing the number of low-value users