



Four ways to traffic shape

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Traffic shaping brainstorming

1. Contextual signals in KV server
2. B&A Zero IGs → zero blob size
3. Existing untrusted signals
4. Caching



Page Context in KV TEE server (possible)

The TEE edition of the KV server would examine contextual signals, such as the publisher URL. In addition, it can augment information based on that 1st party identifier. It suggests the following benefits:

- **Reduced data generation:** Only the necessary information for a specific IG needs to be generated, which is particularly useful when multiple models require different user embeddings per user.
- **Limited identifier submission:** Only the first-party identifier needs to be submitted by the SSP from the untrusted server, while the rest can be loaded in the contextual request.
- **Cost savings:** Users without an IG do not incur any costs for contextual data generation.



B&A Zero IGs → zero blob size (exists today)

The DSP trusted server isn't called in the absence of IGs on the device when the blob size is zero, even with chafing enabled.

The presence of DSP IGs is unavailable for inspection in the untrusted server for privacy reasons.



Existing untrusted signals (in untrusted today)

The SSP has the ability to incorporate any external untrusted signals it deems necessary to facilitate decisions regarding DSP participation.

One such signal is represented by previous wins of a particular DSP for a given user, which can be obtained from the information provided to the DSP at least until 2026 (when Agg reporting and Fenced Frames are introduced).



Caching (in untrusted today)

The contextual DSP response can be cached in the SSP untrusted server. For instance, when a DSP assesses a user's bidding priority, that assessment can be cached for a suitable duration, leading to a reduction in the overall QPS for that specific user.