



IAB Tech Lab

Sellers.json

DRAFT FOR PUBLIC COMMENT v1.0

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Abstract

As part of a broader effort to eliminate the ability to profit from counterfeit inventory in the open digital advertising ecosystem, Sellers.json provides a mechanism to enable buyers to discover who the entities are that are either direct sellers of or intermediaries in the selling of digital advertising.

Public comment will run from April 11, 2019 for thirty days. Email openrtb@iabtechlab.com with any comments or feedback. Comments will be reviewed by the OpenRTB working group. There is not a set date for the spec to be finalized.

About IAB Tech Lab

The IAB Technology Laboratory is a nonprofit research and development consortium charged with producing and helping companies implement global industry technical standards and solutions. The goal of the Tech Lab is to reduce friction associated with the digital advertising and marketing supply chain while contributing to the safe growth of an industry.

The IAB Tech Lab spearheads the development of technical standards, creates and maintains a code library to assist in rapid, cost-effective implementation of IAB standards, and establishes a test platform for companies to evaluate the compatibility of their technology solutions with IAB standards, which for 18 years have been the foundation for interoperability and profitable growth in the digital advertising supply chain. Further details about the IAB Technology Lab can be found at <https://iabtechlab.com>.

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Introduction

Ads.txt has been extremely successful in allowing publisher content distributors and app publishers to define who is authorized to sell a given set of impressions (publisher's advertising inventory) via a bid request. Ads.txt does not however make any attempt at revealing the identities of the publisher account ids within their advertising platform(s) (Publisher's SSP-Supply-Side Platform). A published and accessible Sellers.json file allows the identity of the final seller of a bid request to be discovered (assuming that they are ads.txt authorized). It also allows the identities of all nodes (entities that participated in the bid request) in the [SupplyChain](#) object to also be discovered. Currently, it is possible for the final seller to be identified via the Publisher.name and Publisher.domain attributes, but in practice, these properties are inconsistently populated by various selling systems. Sellers.json enables smaller bid request object sizes by allowing this information to be looked up and cached "offline" rather than supplied with every bid request. Sellers.json also allows the identification of any and all intermediaries that participated in the selling of a bid request.

Change Log

Version	Date	Changes
1.0	April 2019	First Version

SPECIFICATION

This memo specifies a mechanism for advertising systems to publicly declare their authorized publishers and identifiers within those systems. It also describes the format for encoding the instructions to be consumed by advertising systems and their customers. Advertising systems should retrieve these declarations before buying or selling advertising claiming to be on the website.

ACCESS METHOD

Advertising systems should post the sellers.json file on their root domain and any subdomains as needed. For the purposes of this document the "root domain" is defined as the "public suffix" plus one string in the name. Crawlers should incorporate Public Suffix list [16] to derive the root domain.

The declarations must be accessible via HTTP and/or HTTPS from the website that the instructions are to be applied to under a standard relative path on the server host: "/sellers.json"

and HTTP request header containing "Content-Type: text/plain". It may be advisable to additionally use "Content-Type: text/plain; charset=utf-8" to signal UTF8 support.

It is also advisable to prefer HTTPS connections over HTTP when crawling sellers.json files. In any case where data is available at an HTTPS and an HTTP connection for the same URL, the data from HTTPS should be preferred.

For convenience we will refer to this resource as the "/sellers.json" file, though the resource need in fact not originate from a file-system.

If the server response indicates Success (HTTP 2xx Status Code,) the advertising system must read the content, parse it, and utilize the declarations.

If the server response indicates an HTTP/HTTPS redirect (301, 302, 307 status codes), the advertising system should follow the redirect and consume the data as authoritative for the source of the redirect, if and only if the redirect is within scope of the original root domain as defined above. Multiple redirects are valid as long as each redirect location remains within the original root domain. For example an HTTP to HTTPS redirect within the same root domain is valid.

Only a single HTTP redirect to a destination outside the original root domain is allowed to facilitate one-hop delegation of authority to a third party's web server domain. If the third party location returns a redirect, then the advertising system should treat the response as an error. A future version may address other delegation of authority to a third-party web server. Any other redirect should be interpreted as an error and ignored.

If the server response indicates the resource does not exist (HTTP Status Code 404), the advertising system can assume no declarations exist and that no advertising system is unauthorized to buy and sell ads on the website. For any other HTTP error encountered for a URL which the crawler previously found data, the last successfully retrieved data set should be utilized.

FILE FORMAT

All data in the file is serialized using JSON (JavaScript Object Notation). The parent JSON object and all child objects are written to the sellers.json file.

EXPIRATION

Consuming systems of /sellers.json should cache the files, but if they do they must periodically verify the cached copy is fresh before using its contents.

Standard HTTP cache-control mechanisms can be used by both origin server and robots to influence the caching of the /sellers.json file. Specifically consumers and replicators should take note of HTTP Expires header set by the origin server.

If no cache-control directives are present consuming systems should default to an expiry of 7 days.

Proposed implementation

Every advertising system listed in an ads.txt file and any advertising system that is referenced from a SupplyChain object node should also publish a Sellers.json file at the following location:

`http://{advertising_system_domain}/sellers.json`

Examples:

<http://indexexchange.com/sellers.json> -- For Advertising System, indexexchange.com

<http://openx.com/sellers.json> -- For Advertising System openx.com

Object specifications

Object: Parent

The Parent object is the top-level object of a Sellers.json file. It is a container for all properties in a sellers.json file.

Attribute	Type	Description
sellers	object array; required	The list of all Seller objects that are represented by the advertising system. All sellers must be included even if they are confidential.
identifiers	object array; optional	Array of Identifier objects associated with this advertising system. Examples could be TAG-Ids, Dunn and Bradstreet business identifiers, or any custom identifier that a consuming advertising system might need.
contact_email	string; optional	An email address to use to contact the Advertising System for questions or inquiries about this file.

contact_address	string; optional	The business address of the advertising system.
version	float; required	The version of this spec, currently the only valid value is 1.0.
ext	object; optional	Placeholder for advertising-system specific extensions to this object.

Sellers.json object: Identifier

An identifier is an arbitrary name/value pair that is used to communicate common values such as business identifiers, certification identifiers, or any other identifier that a consuming system might need to better interoperate with the seller.

Standard Identifiers are listed in the section [Identifier Names](#) below.

Attribute	Type	Description
name	string; required	The description of the identifier
value	string; required	The value of the identifier

Sellers.json object: Seller

The identification of the selling legal entity that is paid for inventory sold on behalf of seller_id.

It is invalid for a seller_id to represent multiple entities. Every seller_id must map to only a single entity that is paid for inventory transacted with that seller_id. It is valid for a selling entity to have multiple seller_ids.

Attribute	Type	Description
seller_id	string; required	This is the same Id that appears in an ads.txt file and a SupplyChain.nodes array item and in most cases will also appear in the Publisher.Id property of an OpenRTB request.
is_confidential	integer; optional, default 0	Indicates whether the identity of the seller is confidential, where 0 = is not confidential and 1 = is confidential.
directness	string; required	An enumeration of the type of account. A value of 'DIRECT'

		indicates that a single Publisher (content owner) directly controls this account. This tends to mean a direct business contract exists between the Publisher and the advertising system. A value of 'RESELLER' indicates that a specific publisher/content owner does not control this inventory. 'BOTH' indicates that both types of inventory are transacted by this seller. Note that this field should be treated as case insensitive when interpreting the data.
name	string; optional	The name of the company that is paid for inventory (the legal entity) that is transacted under the given seller_id. Can be omitted only when is_confidential is set to 1.
domain	string; optional	The business domain name of the company (the legal entity) that is paid for inventory that is transacted under the given seller_id. When the directness property is set to RESELLER or BOTH, this should be the root domain name of the seller's Sellers.json file. Can be omitted when is_confidential is set to 1 or when the seller doesn't have a web presence.
comment	string; optional	Any helpful description for this inventory. It is useful, for sellers that have multiple seller ids to describe what this seller_id represents.
ext	object; optional	Placeholder for advertising-system specific extensions to this object.

Enumerated List Specification

Identifier Names

The following list defines standard identifiers that should be used in the identifier list.

Name	Description
TAG-ID	Trustworthy Accountability Group ID
DUNS	Dun & Bradstreet DUNS Number.

Sample File Contents

```
{
  "contact_email": "adops@advertisingsystem.com",
  "contact_address": "Advertising System Inc., 101 Main Street, New York, NY 10101",
  "version": 1.0,
  "identifiers": [
    {
      "name": "TAG-ID",
      "value": "a670c89d4a324e47"
    }
  ],
  "sellers": [
    {
      "seller_id": "1942009976",
      "name": "365Scores",
      "domain": "365Scores.com",
      "directness": "DIRECT"
    },
    {
      "seller_id": "1397382429",
      "name": "SpringServe, Inc",
      "domain": "springserve.com",
      "directness": "RESELLER"
    },
    {
      "seller_id": "20000000",
      "name": "Oath",
      "domain": "oath.com",
      "directness": "DIRECT",
      "comment": "NorthAmerica O&O inventory"
    },
    {
      "seller_id": "20000001",
      "name": "Oath",
      "domain": "oath.com",
      "directness": "DIRECT",
      "comment": "APAC O&O inventory"
    },
    {
      "seller_id": "20000002",
      "name": "Oath",
      "domain": "oath.com",
      "directness": "RESELLER",
      "comment": "Non O&O inventory"
    }
  ]
}
```

```
{
  "seller_id": "101010101",
  "name": "HybridSeller",
  "domain": "hybridseller.com",
  "directness": "BOTH",
  "comment": "Sells both O&O and other seller's inventory"
},
{
  "seller_id": "00000001",
  "directness": "RESELLER",
  "is_confidential": 1
}
]
```