



IAB Tech Lab Sellers.json

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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.

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 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.

Audience

Advertising systems, whether they are sellers or buyers of programmatic advertising both benefit from a transparent marketplace where all parties to the transaction are well understood. This document serves to define the information that sellers will provide to both downstream sellers and buyers of programmatic inventory.

Change Log

Version	Date	Changes
1.0	July 2019	First Version

SPECIFICATION

This document specifies a mechanism for advertising systems to publicly declare the sellers that they represent and those sellers’ identifiers within their systems. It also describes the format for encoding the instructions to be consumed by advertising systems and their customers.

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 where the instructions are to be applied under a standard relative path on the server host: "/sellers.json" and HTTP request header containing "Content-Type: application/json". Additionally, you could use "Content-Type: application/json; charset=utf-8" to explicitly signal UTF8 support.

Also, HTTPS connections over HTTP are preferred when crawling sellers.json files. In any case, where data is available at both 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. Despite the use of the word "file," the resource need 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 the scope of the original root domain defined as the public suffix plus one string in the name 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, but for now redirects to a third-party web server and 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) or for any other HTTP error, 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.

Implementation

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

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

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, Dun & 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	string; 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 within an advertising system.

Attribute	Type	Description
seller_id	string; required	This is the same ID that appears in an ads.txt file and in the SupplyChain.nodes array sid property. 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.
seller_type	string; required	An enumeration of the type of account, either PUBLISHER, INTERMEDIARY, or BOTH. A value of "PUBLISHER" indicates that the inventory sold through this account is on a site, app, or other medium owned by the named entity and the advertising system pays them directly. A value of "INTERMEDIARY" indicates that the inventory sold through this account is not owned by the named entity or the advertising system does not pay them directly. '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.
is_passthrough	integer; optional, default 0	<p>A passthrough seller is a facilitator of inventory from the upstream supplier to the consumer of the inventory. The upstream supplier and consumer must establish a business relationship with each other such that the upstream supplier has control of their account within the consumer's platform.</p> <p>A value of 1 indicates the following:</p> <ul style="list-style-type: none"> - This seller has an account control relationship with the downstream/consuming advertising system. - If this seller is the last link in a SupplyChain, the buying system has to have established an account control relationship with this seller to transact the seller's inventory. - If this is not the last link in a SupplyChain than this seller should exist between two entities that have an account control relationship. <p>A value of 0 indicates:</p> <ul style="list-style-type: none"> - The downstream/consuming advertising system has no account control relationship with this seller.
name	string; required when is_confidential=0	The name of the company (the legal entity) that is paid for inventory that is transacted under the given seller_id. Can be omitted only when is_confidential is set to 1.
domain	string; required if seller has a web presence and is_confidential=0	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 seller_type property is set to INTERMEDIARY 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.

Note that domain in sellers.json and SupplyChain are to be populated with only the **root domain** and not a full URL, much like 'domain' in OpenRTB's Site object and the domain definition used for ads.txt. For the purposes of this document the "root domain" is defined as the "public suffix" plus one string in the name. Implementers should incorporate Public Suffix list [16] to derive the root domain.

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": "28cb65e5bbc0bd5f"
    }
  ],
  "sellers": [
    {
      "seller_id": "1942009976",
      "name": "Publisher1",
      "domain": "publisher1.com",
      "seller_type": "PUBLISHER"
    },
    {
      "seller_id": "1397382429",
      "name": "Exchange1",
      "domain": "exchange1.com",
      "seller_type": "INTERMEDIARY"
    },
    {
      "seller_id": "20000000",
      "name": "Seller And Intermediary, Inc",

```

```
"domain": "sellerandintermediary.com",
"seller_type": "PUBLISHER",
"comment": "NorthAmerica O&O inventory"
},
{
  "seller_id": "20000001",
  "name": "Seller And Intermediary, Inc",
  "domain": "sellerandintermediary.com",
  "seller_type": "PUBLISHER",
  "comment": "APAC O&O inventory"
},
{
  "seller_id": "20000002",
  "name": "Seller And Intermediary, Inc",
  "domain": "sellerandintermediary.com",
  "seller_type": "INTERMEDIARY",
  "comment": "Non O&O inventory"
},
{
  "seller_id": "101010101",
  "name": "Hybrid Seller",
  "domain": "hybridseller.com",
  "seller_type": "BOTH",
  "comment": "Sells both O&O and other sellers' inventory"
},
{
  "seller_id": "00000001",
  "seller_type": "INTERMEDIARY",
  "is_confidential": 1
},
{
  "seller_id": "EB_0001",
  "name": "Passthrough Publisher",
  "domain": "passthroughpublisher.com",
  "seller_type": "PUBLISHER",
  "is_passthrough": 1,
  "comment": "direct buyer/seller of this inventory must establish an account
relationship with Passthrough Publisher"
}
]
}
```