

Protect My Choices extension v2.0: Fetching the AdChoices Signal in Real-Time

Background

When consumers install the Protect My Choices (v2.0) extension for Chrome, any preferences expressed through the YourAdChoices tools will be stored as a string in the extension, according to the AdChoices Signal specification document. The value of this string is available to any participant with the code on the page.

Accessing User Preferences

Web participants can access these user preferences from the extension, as required and when available, in real time. Vendors who serve ads or collect data about users, such as ad servers, exchanges, DSPs, DMPs, CDPs, etc., will need to listen for the “**ExtensionLoaded**” event name on the top application level. For example:

```
window.addEventListener('message', (event) => {  
  if (event.data.type === "ExtensionLoaded") {  
    // Do something when the extension is loaded  
  }  
});
```

This sample code confirms that the extension was loaded. If the extension is loaded, the following code retrieves the user preference string:

```
window.postMessage({type: "GetAdPreferences"}, "*");
```

When combined, the final code block for implementation should look like this:

```
window.addEventListener('message', (event) => {  
  if (event.data.type === "ExtensionLoaded") {  
    window.postMessage({type: "GetAdPreferences"}, "*");  
  }  
});
```

Vendors should send the preference string to themselves so that it can be passed on to other parties. If vendors need to know the users' preferences before ad decisioning, they should delay ad decisioning until after retrieving the string.

Example Strings

Example 1: No Global Preference, Three Participant Preferences, One Category Preference

Base64:

BYVHiWQADABEAIQAYABBIEA

Binary:

000010110000101010001111000100101100100100000000011000000000010000000000
 0001000000000011000000000010000000110010001

Annotated Binary:

Bits	Field	Value/Description
000001	(Header Section) Version	Version 1 of the specification is used.
01100001010100011110001001011001	Timestamp	1632756313 seconds since epoch, or Monday, September 27, 2021 3:25:13 PM UTC.
0010	Global IBA Choice Status	2; the user has not expressed a preference.
000000000011	(Per-Participant Records Section) Number of Per-Participant Records	3 per-participant records will follow.
000000000001	(First Participant Choice Status Record) Participant ID	Participant ID 1 (as defined in the participants reference file).
0000	Choice Status	0; the user has explicitly chosen to limit data collection and use for IBA.

000000000010	<i>(Second Participant Choice Status Record) Participant ID</i>	Participant ID 2.
0001	Choice Status	1; the user has explicitly chosen to allow data collection & use for IBA.
000000000011	<i>(Third Participant Choice Status Record) Participant ID</i>	Participant ID 3.
0000	Choice Status	0; the user has explicitly chosen to limit data collection and use for IBA.
000000000001	<i>(Per-Category Records Section) Number of Per-Category Records</i>	1 per-category records will follow.
000000011001	<i>(First Category Record) Category ID</i>	Category ID 25: Travel (as defined in the category reference file).
0001	Category Preference	1; the user has expressed an explicit preference to allow/include this category.

Example 2: Global Preference Only

Base64:

BYVHiWRAAAAA

Binary:

00000101100001010100011110001001011001000000000000000000000000

Annotated Binary:

Bits	Field	Value/Description
000001	<i>(Header Section)</i> Version	Version 1 of the specification is used.
01100001010100011110001001011001	Timestamp	1632756313 seconds since epoch, or Monday, September 27, 2021 3:25:13 PM UTC.
0000	Global IBA Choice Status	0; the user has expressly chosen to limit IBA.
000000000000	<i>(Per-Participant Records Section)</i> Number of Per-Participant Records	0 per-participant records will follow.
000000000000	<i>(Per-Category Records Section)</i> Number of Per-Category Records	0 per-category records will follow.

In this example, there are no per-participant or per-category records, so no such records appear, however the number of per-participant or per-category records fields are always required for correct parsing.

Future Development

The extension is expected to be available only for the desktop version of Google Chrome. The expectation is that the DAAs will then make future versions available for other major browsers, including Safari (desktop and mobile) and other browsers based on market demand.