

Data Partner Integration Guide

Overview

The [x+1] Origin platform enables marketers to deliver the most relevant offer to users at the most opportune moment across a multitude of channels. A key component of realizing a successful digital marketing strategy is the availability of relevant data to make intelligent marketing decisions with. Making this data accessible in the [x+1] Origin data management platform (DMP) and the synchronization of identifiers between [x+1] and its data partners is what drives a marketer's ability to target to specific audiences.

This guide will serve to demonstrate the most effective and standardized ways [x+1] can interact with a data partner to exchange cookie identifiers and accept data into the Origin platform.

ID / Cookie Sync

In order for [x+1] and a data partner to share information about visitors, an exchange of identifiers must take place. This allows for a data partner to communicate segment information to [x+1] and vice versa. This bi-directional synchronization of identifiers (i.e. cookie IDs) can be invoked by the data partner, by [x+1], or by both parties for an optimal match footprint.

Parameter Information and Definitions

There are several parameters that are instrumental in realizing successful cookie match calls with [x+1]. These parameters and example values are defined below.

[x+1] Cookie ID

The [x+1] cookie ID has a standard format of two capitalized letters that are then followed by a dash (-) and then 17 digits. The total length of the [x+1] cookie ID is 20 characters.

Based on the above specifications, the value 'AB-00000000000000123' is an example of an [x+1] cookie ID and will be used for demonstration purposes within this document.

Data Partner ID

All data partners of [x+1] are given a unique identifier within the [x+1] Origin platform. This ID is a numeric value such as '12345' (which will be used for demonstration purposes within this document).

Data Partner Match Endpoint

The data partner should provide to [x+1] a URI that can accept the [x+1] cookie ID as a parameter.

[x+1] will store this endpoint URI within our system for a more streamlined redirect implementation. As a result, it can be referenced by a unique identifier.

An example endpoint could be 'http://www.datapartner.com/cookiesync?xid=' and [x+1] could store this URI and assign the ID value of '9' to this endpoint. These values will be used for demonstration purposes later within this document.

Cookie Sync Invoked by Data Partner

Specifications

For a cookie sync invoked by the data partner, a call to an [x+1] endpoint will be made that includes the data partner's identifier. This call will redirect back to a data partner provided endpoint with the [x+1] cookie ID. When the [x+1] URI is called, [x+1] will store and associate the partner ID to our cookie ID. A similar process should occur at the data partner when the [x+1] ID is provided.

The format of the URI to invoke a cookie sync to [x+1] is:

```
http://ckm-m.xpl.ru4.com/cx?_i=[DATA_PARTNER_ID]&_u=[DATA_PARTNER_COOKIE_ID]&
redirect=[DATA_PARTNER_ENDPOINT_ID]
```

The cookie sync can also take place against a secure protocol and its URI format is:

```
https://msec.xpl.ru4.com/cx?_i=[DATA_PARTNER_ID]&_u=[DATA_PARTNER_COOKIE_ID]&
redirect=[DATA_PARTNER_ENDPOINT_ID]
```

The definitions of the parameters above are:

- **[DATA_PARTNER_ID]** = This value is the [x+1] provided unique identifier, as defined above.
- **[DATA_PARTNER_COOKIE_ID]** = This value is the data partner's cookie identifier for the visitor.
- **[DATA_PARTNER_ENDPOINT_ID]** = This value is the data partner match endpoint ID assigned to the partner's cookie sync endpoint.

Example

A data partner with an [x+1]-provided ID of '12345' has provided a cookie match endpoint that was assigned a redirect ID of '9'. They would like to match with [x+1] for a user they refer to as 'x9fm24p'. The non-secure call would look like the following:

```
http://ckm-m.xpl.ru4.com/cx?_i=12345&_u=x9fm24p&redirect=9
```

This call to [x+1] would serve to store the relationship between the data partner's provided ID of 'x9fm24p' and the [x+1] cookie ID. It would then redirect back to the data partner and provide the [x+1] cookie ID as needed.

Cookie Sync Invoked by [x+1]

Specifications

For a cookie sync invoked by [x+1], a call to a provided data partner endpoint will be made that includes the [x+1] cookie identifier. This should ultimately redirect back to an [x+1] endpoint and include the data provider's cookie identifier so [x+1] can store the relationship as well.

The data partner URI to invoke should be provided to [x+1] with specifications as to where to place the [x+1] cookie ID and how to invoke a redirect back to [x+1] that includes the data partner ID. [x+1] will provide the URI to the service that will store the data provider ID against the [x+1] cookie ID as needed.

Example

A data partner (with a data partner ID of '12345') has an endpoint where they can store the [x+1] cookie ID located at 'http://www.datapartner.com/cookiesync?xid='. The partner has informed [x+1] that by appending '&redirect=' with an endpoint, substituting '%PARTNER_ID%' for the data partner ID as a real-time macro replacement, will redirect such that the synchronization of IDs can take place at [x+1] as well.

As a result, the call invoked by [x+1] when the user recognized as 'AB-0000000000000123' is encountered will be:

```
http://www.datapartner.com/cookiesync?xid=AB-0000000000000123&redirect=http://ckm-
m.xpl.ru4.com/cx?_i=12345&_u=%PARTNER_ID%
```

Data Transfer

Assuming a valid cookie match process has been established, the ability to transfer data for use within the [x+1] platform can be realized. There exists several options for providing data to the [x+1] Origin system: in real-time via a server-to-server integration and in a file-based batch process.

In either approach, a data taxonomy must be agreed upon between the data partner and [x+1]. This taxonomy will be used to map the information provided by the partner to store as needed within the [x+1] DMP.

Similarly, regardless of data transfer approach, the expectation is that the [x+1] ID is known and the data will be keyed against this ID and not the data partner ID.

Data Structure and Taxonomy

The structure of the data transmitted to [x+1] should be agreed upon by both parties. Common ways that the data is represented when made available to [x+1] is by delimiting a delimited set of segment-to-value pairings. Essentially, provide a segment you would like to inform [x+1] about for a user along with a value and delimit these combinations if several exist.

As an example, segment identifiers can be delimited from their value by colon (:). Several segment declarations can be delimited by a comma (.). A user who may have a value of '3' for a segment named 'Segment100001' and a value of '0' for a segment named 'Segment100005' could be represented by 'Segment100001:3,Segment100005:0'.

The relationship (or taxonomy) between the provided segments and what they actually represent must also be made apparent. Using the previous example, 'Segment100001' may indicate 'Propensity for a new car' and have index values ranging from 1 to 10 (with 10 being the most likely to be in the market for a new car). Similarly, 'Segment100005' may indicate whether a visitor has a current home loan and valid values are only 0 and 1. The understanding of the data being transmitted is crucial to properly mapping the data into the [x+1] DMP.

Real-time Server-to-Server Data Transfer

A data partner is able to utilize our RESTful Web Services API (WSAPI) to facilitate the transmission of data.

Specifications

Request Type

The request should be a POST.

Request Protocol

The request can be made either using secure (https) or non-secure (http) protocols.

Request URI

The request URI should be formatted in the following manner:

```
http://s.xpl.ru4.com/ws/65121/activity/[TAG_CODE]
```

Request Body

The request body should be formatted in the following manner:

```
{
  "IPAddress": "0.0.0.0",
  "UserAgent": "[USER_AGENT]",
  "GUID": "[GUID]",
  "XP_UID": "[XP_COOKIE_ID]",
  "Data": {
    "[DATA_PARAM_NAME]": "[DATA_VALUE]"
  }
}
```

Request Parameters

- **[TAG_CODE]** = This [x+1]-provided value is an overarching reference to the integration with the data partner.
- **[USER_AGENT]** = This [x+1]-provided value should remain static across all calls and serves to help identify the integration.
- **[GUID]** = This [x+1]-provided value should remain static across all calls and serves to help identify the integration.
- **[XP_COOKIE_ID]** = This parameter represents where the known [x+1] cookie ID would be provided.

- **[DATA_PARAM_NAME]** = This [x+1]-provided value represents the collection point for the data partner's segment information. This value may change depending on the extent of the relationship and there could be several parameters that represent different sets of data with varying taxonomies.
- **[DATA_VALUE]** = This parameter represents the actual segment data that is associated to the specific user. The information provided here should align to the taxonomy agreed upon by the data partner and [x+1].

Example

A data partner named 'InfoCorp' would like to transmit data for a user they have cross-matched back to an [x+1] ID of 'AB-00000000000000123'. They would like to send over the aforementioned segments of 'Propensity for a new car' and 'Current home loan indicator'. [x+1] has provided the tag code, recommended user agent and GUID values, and the data parameter name to pass the info along within. The POST request may look like the following:

Request URI:

```
http://s.xpl.ru4.com/ws/65121/activity/infocorp_data
```

Request Body:

```
RequestObject={
  "IPAddress": "0.0.0.0",
  "UserAgent": "InfoCorp Data Integration",
  "GUID": "InfoCorp Data",
  "XP_UID": "AB-00000000000000123",
  "Data": {
    "ssv_ic": "Segment10001:3,Segment10005:0"
  }
}
```

Batch File Data Transfer

A data partner is able to collect and deliver visitor segment information via a batch file.

Specifications

Transfer

Delivery of a data partner's batch file can occur at an agreed upon cadence. Further, drop-off or pick-up locations and credentials can be discussed and agreed upon by all involved parties. Commonly, [x+1] will create an SFTP drop-off zone for the files, inform the data partner of the credentials, and scan for new files at a regular interval. Often, .done files are utilized to indicate when a data partner transfer has completed successfully such that [x+1] does not pick up and process an incomplete or not fully transferred file.

Format

The batch file should not contain a header row and all rows should contain two columns:

Column 1: This column should contain the [x+1] ID.

Column 2: This column should contain the segment information in an agreed upon, delimited format. As mentioned above, common delimiter approaches include delimiting segments from their values by a colon (:) and the various segment information pieces by commas (,).

Example

A data partner would like to transmit segment information to [x+1]. They have several segments with a range of values and have come to an agreed taxonomy structure with [x+1]. A portion of the file may look like the following:

AB-00000000000000123	Segment10001:3,Segment10002:0,Segment10005:Male
XY-000000000000183766	Segment10001:9,Segment10005:Female
BO-00000000000008176	Segment10005:Female,Segment10002:1

Conclusion

The [x+1] Origin DMP allows marketers to leverage data from many sources to make informed decisions about what the visitor is presented with. The data driving these decisions often comes from data partners. The transmission of this data is facilitated from a bi-directional cookie sync between [x+1] and its data partners and an agreed upon structure and taxonomy. Ultimately, end-users of the DMP are empowered and realize sophisticated marketing strategies using a breadth of data.