

# O2O Tracking Implementation Guide

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## Introduction

This document details the process to integrate tracking with your online-to-offline (O2O) system and the advertisers you are partnered with on the Rakuten Affiliate Network. The process outlined in this guide assumes you have worked with the advertisers to complete any integration necessary to enable the O2O functionality with their system.

## Online Tracking

Traffic referred by the O2O campaign is sent directly to a customized landing or through a tracking redirect before delivering the user to the landing page. Our system exposes a tracking ID to this process. The tracking ID is passed under the query parameter **siteID** and holds a 34-character alphanumeric value:

```
http://www.o2o-advertiser.com/landing/somepage?siteID=xxxxxxxxxx-  
YYYYYYYYYYYYYYYYYYYY
```

```
http://www.o2o-provider.com/redirect?a=b&siteID=yyyyyyyyyy-  
xxxxxxxxxxxxxxxxxxxxxxxx
```

Your process must capture the siteID value, associate it with the user, and later with the online redemption action. For example, the online redemption action can be linking a credit card number or printing an in-store coupon.

## Offline Tracking: Transaction Reporting

Report any applicable O2O sales that occur directly to our system. Sales must be structured as individual **flat files per advertiser partner** using a **JSON data structure**.

### JSON Transaction Example

**NOTE:** The following example is formatted using pretty print for visual purposes. Actual JSON content must be formatted as outlined in the File Structure section below.

```
{
  "sku_order": {
    "orderid": "TEST1234",
    "siteid": "1Mh2Xiq9xN0-73ivYTV2VtSbVaH6tvQ18Q",
    "time_entered": "2018-04-03T10:22:01Z",
    "currency": "USD",
    "trans_date": "2018-04-07T17:58:58Z",
    "items": [
      {
        "sku": "O2O_SKUA",
        "quantity": "1",
        "amount": "4999",
        "product_name": "O2O: Product A"
      },
      {
        "sku": "O2O_SKUB",
        "quantity": "3",
        "amount": "1998",
        "product_name": "O2O: Product B"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 1",
      "o2o_store_address": "123 Some St",
      "o2o_store_city": "Some City",
      "o2o_store_state": "Some State",
      "o2o_store_zip": "11111",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}
```

## JSON Fields

Fields marked with an asterisk character (\*) are required.

Field	Description
<i>sku_order</i> *	This object contains information for the entire order and must include these elements: <i>orderid</i> , <i>siteid</i> , <i>time_entered</i> , <i>currency</i> , <i>trans_date</i> , and the <i>items</i> array.
<i>orderid</i> *	This is a unique transaction OrderID composed of 1 to 40 non-blank characters.
<i>siteid</i> *	This is the siteID value that was attributed to the online redemption event. If tracking is not implemented for the online redemption event, specify your encrypted Publisher ID. Note that siteID is used for u1 reporting purposes. By using the encrypted Publisher ID, you will not have access to the same level of data in reporting.
<i>time_entered</i> *	<p>This field represents the date the user initiated the online redemption event. If tracking is not implemented for the online redemption event, specify the offline transaction date and time stamp.</p> <p>Should be formatted <i>yyyy-mm-ddThh:mm:ssZ</i> in GMT 24-hour. The <b>T</b> delimiter between date and time and the <b>Z</b> at the end of the value are required.</p>
<i>currency</i> *	The ISO4217 currency code reference. Use USD, CAD, GBP, JPY, BRL, or AUD for US dollar, Canadian dollar, British pound, Japanese yen, Brazilian real, or Australian dollar, respectively.
<i>trans_date</i> *	<p>This field represents the date the offline transaction was completed.</p> <p>Should be formatted <i>yyyy-mm-ddThh:mm:ssZ</i> in GMT 24-hour. The <b>T</b> delimiter between date and time and the <b>Z</b> at the end of the value are required.</p>

Field	Description
<i>items*</i>	This array should contain an object representing each product or service purchased. The item object should contain the elements <i>sku</i> , <i>quantity</i> , <i>amount</i> , and <i>product_name</i> .
<i>sku*</i>	<p>This is a unique identifier for each product and service. It can be up to 40 case-sensitive alphanumeric characters. Append the prefix "O2O_" to every SKU value; for example, report "O2O_123abc" for the SKU "123abc".</p> <p>If you do not have access to product-level purchase details, use "O2O_order" as the SKU value.</p>
<i>quantity*</i>	<p>The number of units of this product the customer has purchased.</p> <p>If you do not have access to product-level purchase details, use 1 (one) as the Quantity value.</p>
<i>amount*</i>	<p>This is unit <i>price * units sold * 100</i>; for example, five units sold at \$1.00 are entered at 500. This excludes shipping and tax. For example, using GBP as the currency: 3 units sold at £1.25 is output as 375.</p> <p>If you do not have access to product-level purchase details, report the order sub-total or total as the amount value. The same data format rule applies: the order amount should be calculated as order sub-total * 100.</p>
<i>product_name*</i>	<p>This field can be up to 512 alphanumeric characters. It provides a brief description or name for a product or service. Append the prefix "O2O: " to every product name value; for example, report "O2O: Boots" for the product name "Boots".</p> <p>If you do not have access to product-level purchase details, use "O2O Order" as the product name value.</p> <p>If you do not know the product name, include the field but leave the value blank.</p> <p>Special characters should be omitted or converted into HTML entity codes.</p>

Field	Description
<i>optional_data</i>	The object should be nested within the <i>sku_order</i> object and should include the following store elements: <i>o2o_store_id</i> , <i>o2o_store_name</i> , <i>o2o_store_address</i> , <i>o2o_store_city</i> , <i>o2o_store_state</i> , <i>o2o_store_zip</i> , <i>o2o_store_country</i> , <i>o2o_bank_partner</i> .
<i>o2o_store_id</i>	The ID assigned to the store where the purchase occurred.
<i>o2o_store_name</i>	The name of the store where the purchase occurred.
<i>o2o_store_address</i>	The address of the store where the purchase occurred.
<i>o2o_store_city</i>	The city of the store where the purchase occurred.
<i>o2o_store_state</i>	The state of the store where the purchase occurred.
<i>o2o_store_zip</i>	The Zip code of the store where the purchase occurred.
<i>o2o_store_country</i>	The country of the store where the purchase occurred. Values should follow ISO 3-character format.
<i>o2o_bank_partner</i>	The name of the banking partner utilized for tracking. This process is specific to card linking.

## JSON File Structure

The file's content must be structured as a single JSON object per line, with the line being terminated by a newline character. Below are file examples depending on the level of data you have access to.

### Item-Level Example

Follow this example if you have access to product-level purchase details:

```
{
  "sku_order": {
    "orderid": "TEST1234",
    "siteid": "1Mh2Xiq9xN0-73ivYTV2VtSbVaH6tvQl8Q",
    "time_entered": "2018-04-03T10:22:01Z",
    "currency": "USD",
    "trans_date": "2018-04-07T17:58:58Z",
    "items": [
      {
        "sku": "O2O_SKUA",
        "quantity": "1",
        "amount": "4999",
        "product_name": "O2O: Product A"
      },
      {
        "sku": "O2O_SKUB",
        "quantity": "3",
        "amount": "1998",
        "product_name": "O2O: Product B"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 1",
      "o2o_store_address": "123 Some St",
      "o2o_store_city": "Some City",
      "o2o_store_state": "Some State",
      "o2o_store_zip": "11111",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}
```

```
{
  "sku_order": {
    "orderid": "TEST345",
    "siteid": "1Mh2Xiq9xN0-dc5SYTV2VtSx1aH6tvQl8Q",
    "time_entered": "2018-04-06T21:00:32Z",
    "currency": "USD",
    "trans_date": "2018-04-07T21:32:55Z",
    "items": [
      {
        "sku": "O2O_SKUA",
        "quantity": "1",
        "amount": "4999",
        "product_name": "O2O: Product A"
      },
      {
        "sku": "O2O_SKUB",
        "quantity": "3",
        "amount": "1998",
        "product_name": "O2O: Product B"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 2",
      "o2o_store_address": "345 Another St",
      "o2o_store_city": "Another City",
      "o2o_store_state": "Another State",
      "o2o_store_zip": "22222",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}
```

## Order-Level Example

Follow this example if you do not have access to product-level purchase details:

```
{
  "sku_order": {
    "orderid": "TEST1234",
    "siteid": "1Mh2Xiq9xN0-73ivYTV2VtSbVaH6tvQl8Q",
    "time_entered": "2018-04-03T10:22:01Z",
    "currency": "USD",
    "trans_date": "2018-04-07T17:58:58Z",
    "items": [
      {
        "sku": "O2O_order",
        "quantity": "1",
        "amount": "9999",
        "product_name": "O2O Order"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 1",
      "o2o_store_address": "123 Some St",
      "o2o_store_city": "Some City",
      "o2o_store_state": "Some State",
      "o2o_store_zip": "11111",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}

{
  "sku_order": {
    "orderid": "TEST345",
    "siteid": "1Mh2Xiq9xN0-dc5SYTV2VtSx1aH6tvQl8Q",
    "time_entered": "2018-04-06T21:00:32Z",
    "currency": "USD",
    "trans_date": "2018-04-07T21:32:55Z",
    "items": [
      {
        "sku": "O2O_order",
        "quantity": "1",
        "amount": "35999",
        "product_name": "O2O Order"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 2",
      "o2o_store_address": "345 Another St",
      "o2o_store_city": "Another City",
      "o2o_store_state": "Another State",
      "o2o_store_zip": "22222",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}
```

## Special Considerations

Each element in the *items* array reflects a unique product (SKU). If a customer places an order with three quantities of product A costing \$100 each and one quantity of product B costing \$10 each, the *items* array should contain two distinct elements: one for each product item.

Purchases of the same SKU must be represented as an aggregated element in the array. This is more applicable to product variants depending on the SKU value you report. For example, a customer places one order with two quantities of T-shirt costing \$10 each, one blue and one white. If the SKU value only identifies the product, you must report this as a single element in the *items* array with a combined quantity and amount. If the SKU value identifies the product and variant detail, you can report this as separate elements in the *items* array.



## File Delivery

Files should be delivered via SFTP to **mftp.linksynergy.com**. Your Rakuten Affiliate Network contact will provide you with credentials to your SFTP account. You must provide us with the static IP address of the machine that will transmit the files.

## File Naming Convention

The transaction files must follow this name convention:

**[MID]\_o2o-trans\_[YYYYMMDD]\*.json**

Where:

- [MID] is the advertiser's unique identifier in the Rakuten Affiliate Network. You can find an advertiser's MID in the Publisher Dashboard:
  - In the **New Publisher Dashboard**, go to **Advertisers** in the navigation header and click **My Advertisers**. Click the advertiser's name to view their profile page, where their MID is displayed.
  - In the **Legacy Publisher Dashboard**, go to **Programs** in the navigation header and click **My Advertisers**. Hover over the advertiser's name to view their MID.
- [YYYYMMDD] is the date of transmission.
- The asterisk character (\*) is an optional wildcard you can use to distinguish each file further if you send more than one file per advertiser in a given day.

## Accounting for Discounts

Order discounts can be reported as part of your order submission to the Rakuten Affiliate Network. To report a discount, use one of these two options:

### 1. Reduced Item Amount Discount Option

- If a customer purchases one SKU A for \$10.00 and two SKU B for \$45.00 each and redeems a 10% order-level discount, adjust the reported amount value to reflect the applied discounts using the following logic:
  - First, determine each item's percent of the order subtotal with this calculation: **(product price \* quantity) / order subtotal = item percent**
  - Next, determine the amount of the discount to apply to each item with this calculation: **discount amount \* item percent = item applicable discount**
  - Finally, **subtract** the **item applicable discount** value from the **item subtotal**. This is the amount you should report.

In the example provided above, the amounts sent would be \$9.00 and \$81.00, as shown here:

```
{ "sku_order": {
  "orderid": "TEST1234",
  "siteid": "1Mh2Xiq9xN0-73ivYTV2VtSbVaH6tvQ18Q",
  "time_entered": "2018-04-03T10:22:01Z",
  "currency": "USD",
  "trans_date": "2018-04-07T17:58:58Z",
  "items": [
    { "sku": "O2O_SKUA",
      "quantity": "1",
      "amount": "900",
      "product_name": "O2O: Product A"
    }, {
      "sku": "O2O_SKUB",
      "quantity": "3",
      "amount": "8100",
      "product_name": "O2O: Product B"
    }
  ],
  "optional_data": {
    "o2o_store_id": "123456",
    "o2o_store_name": "Store Name 1",
    "o2o_store_address": "123 Some St",
    "o2o_store_city": "Some City",
    "o2o_store_state": "Some State",
    "o2o_store_zip": "11111",
    "o2o_store_country": "USA",
    "o2o_bank_partner": "American Express"
  }
}}
```

## 2. Discount SKU Option:

- Include an extra record within the data submission depicting the discount:
  - For **SKU**, enter the string "O2O\_Discount".
  - For **quantity**, enter a 0.
  - For **amount**, enter a negative dollar value of the discount (in cents).
  - For **product name**, enter "O2O: Discount".

This is an example of option 2 with a \$5 Discount SKU:

```
{
  "sku_order": {
    "orderid": "TEST1234",
    "siteid": "lMh2Xiq9xN0-73ivYTV2VtSbVaH6tvQl8Q",
    "time_entered": "2018-04-03T10:22:01Z",
    "currency": "USD",
    "trans_date": "2018-04-07T17:58:58Z",
    "items": [
      {
        "sku": "O2O_SKUA",
        "quantity": "1",
        "amount": "2000",
        "product_name": "O2O: Product A"
      },
      {
        "sku": "O2O_Discount",
        "quantity": "3",
        "amount": "-500",
        "product_name": "O2O: Product B"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 1",
      "o2o_store_address": "123 Some St",
      "o2o_store_city": "Some City",
      "o2o_store_state": "Some State",
      "o2o_store_zip": "11111",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}
```

## Cancellations and Returns

To report order cancellations, resend the original record lines with a negative amount (or positive in the case of discounts). To report returns, similarly resend the originally reported record and adjust the quantity and amount to reflect the return.

Using our original example in the Special Considerations section, if a customer purchases three quantities of product A at \$100 apiece and one quantity of product B at \$10, this should be reported as follows:

```
{
  "sku_order": {
    "orderid": "TEST1234",
    "siteid": "lMh2Xiq9xN0-73ivYTV2VtSbVaH6tvQl8Q",
    "time_entered": "2018-04-03T10:22:01Z",
    "currency": "USD",
    "trans_date": "2018-04-07T17:58:58Z",
    "items": [
      {
        "sku": "O2O_SKUA",
        "quantity": "3",
        "amount": "30000",
        "product_name": "O2O: Product A"
      },
      {
        "sku": "O2O_SKUB",
        "quantity": "1",
        "amount": "1000",
        "product_name": "O2O: Product B"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 1",
      "o2o_store_address": "123 Some St",
      "o2o_store_city": "Some City",
      "o2o_store_state": "Some State",
      "o2o_store_zip": "11111",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}
```

If the customer cancels the full order, resend the records with a negative amount value:

```
{
  "sku_order": {
    "orderid": "TEST1234",
    "siteid": "lMh2Xiq9xN0-73ivYTV2VtSbVaH6tvQl8Q",
    "time_entered": "2018-04-03T10:22:01Z",
    "currency": "USD",
    "trans_date": "2018-04-07T17:58:58Z",
    "items": [
      {
        "sku": "O2O_SKUA",
        "quantity": "3",
        "amount": "-30000",
        "product_name": "O2O: Product A"
      },
      {
        "sku": "O2O_SKUB",
        "quantity": "1",
        "amount": "-1000",
        "product_name": "O2O: Product B"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 1",
      "o2o_store_address": "123 Some St",
      "o2o_store_city": "Some City",
      "o2o_store_state": "Some State",
      "o2o_store_zip": "11111",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}
```

Alternatively, if the customer returns two quantities of product A and one quantity of product B, this should be reported as follows:

```
{
  "sku_order": {
    "orderid": "TEST1234",
    "siteid": "lMh2Xiq9xN0-73ivYTV2VtSbVaH6tvQl8Q",
    "time_entered": "2018-04-03T10:22:01Z",
    "currency": "USD",
    "trans_date": "2018-04-07T17:58:58Z",
    "items": [
      {
        "sku": "O2O_SKUA",
        "quantity": "3",
        "amount": "-2000",
        "product_name": "O2O: Product A"
      },
      {
        "sku": "O2O_SKUB",
        "quantity": "1",
        "amount": "-1000",
        "product_name": "O2O: Product B"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 1",
      "o2o_store_address": "123 Some St",
      "o2o_store_city": "Some City",
      "o2o_store_state": "Some State",
      "o2o_store_zip": "11111",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}
```

When cancelling an order, you must account for any applied discounts. If you use option one from the Accounting for Discounts section to report the discount, the cancellation data you report must reflect the discounted item price.

If you use option two from the Accounting for Discounts section to report a discount, you must send a cancel record for the discounted item. To do this, report the discount record with a positive amount. This is an example of option two that cancels the order record used in the Example \$5.00 Discount SKU:

```
{
  "sku_order": {
    "orderid": "TEST1234",
    "siteid": "lMh2Xiq9xN0-73ivYTV2VtSbVaH6tvQl8Q",
    "time_entered": "2018-04-03T10:22:01Z",
    "currency": "USD",
    "trans_date": "2018-04-07T17:58:58Z",
    "items": [
      {
        "sku": "O2O_SKUA",
        "quantity": "1",
        "amount": "-2000",
        "product_name": "O2O: Product A"
      },
      {
        "sku": "O2O_Discount",
        "quantity": "3",
        "amount": "500",
        "product_name": "O2O: Product B"
      }
    ],
    "optional_data": {
      "o2o_store_id": "123456",
      "o2o_store_name": "Store Name 1",
      "o2o_store_address": "123 Some St",
      "o2o_store_city": "Some City",
      "o2o_store_state": "Some State",
      "o2o_store_zip": "11111",
      "o2o_store_country": "USA",
      "o2o_bank_partner": "American Express"
    }
  }
}
```

**Important:** Any cancellation or return must be reported within 90 days of the original record being reported. Cancellations and returns reported after 90 days will not be accepted.