Events API

Sitecore Discover

Javascript & REST API Specification v 3.1.9

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Chapter 1 Introduction

Event tracking is a feature offered by Sitecore Discover that allows our customers to capture and report on visitor actions or other events on their eCommerce sites and/or applications. Reporting all events for the conversion funnel is critical. Events are one of the important signals used by the artificial intelligence core of the Sitecore Discover System.

This document describes the mechanism that Sitecore Discover uses to recognize and process events to enable tracking of visitors' activity.

Chapter 1 Introduction

Chapter 2 Overview

The Sitecore Discover system tracks visitor information to generate personalized search results and recommendations and leverages the events to trigger behavioral actions (for example, automatically sending emails to users who abandoned carts).

The following diagram shows the most common flow of events and product feed between a customer website and the Discover system.
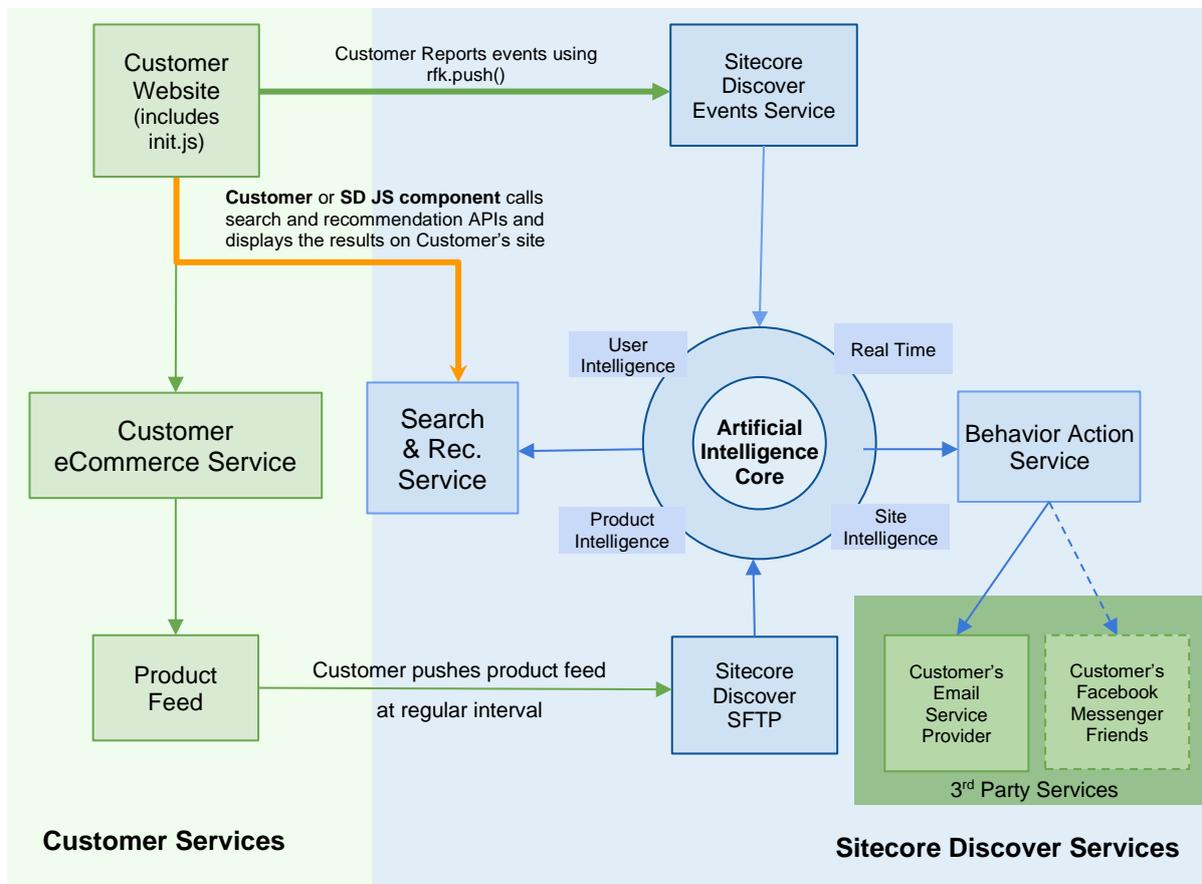
In the diagram:

- Green arrows represent the flow of data from a customer website to Sitecore Discover.

- Blue arrows show the flow of data from Sitecore Discover to various subsystems or customer services.

- Orange arrows represent calls made by the site (if the customer integration uses Sitecore Discover JavaScript) or by the customer side (if the customer integration uses Discover APIs).

- Finally, dark green blocks represent third-party services that Sitecore Discover integrates with on behalf of the customer.

2.1 Sitecore Discover Beacon

To send events to Sitecore Discover, you must include the Sitecore Discover Beacon on your website. Add the beacon at the beginning of the `<head>` section of all tracked web pages. The Sitecore Discover Beacon is part of the SD Analytics SDK. This SDK does not depend on any other library (such as jQuery).

You can find instructions on how to include the Sitecore Discover Beacon in the **Developer Resources** > **API Access** section of the Customer Engagement Console, as shown in the following example:
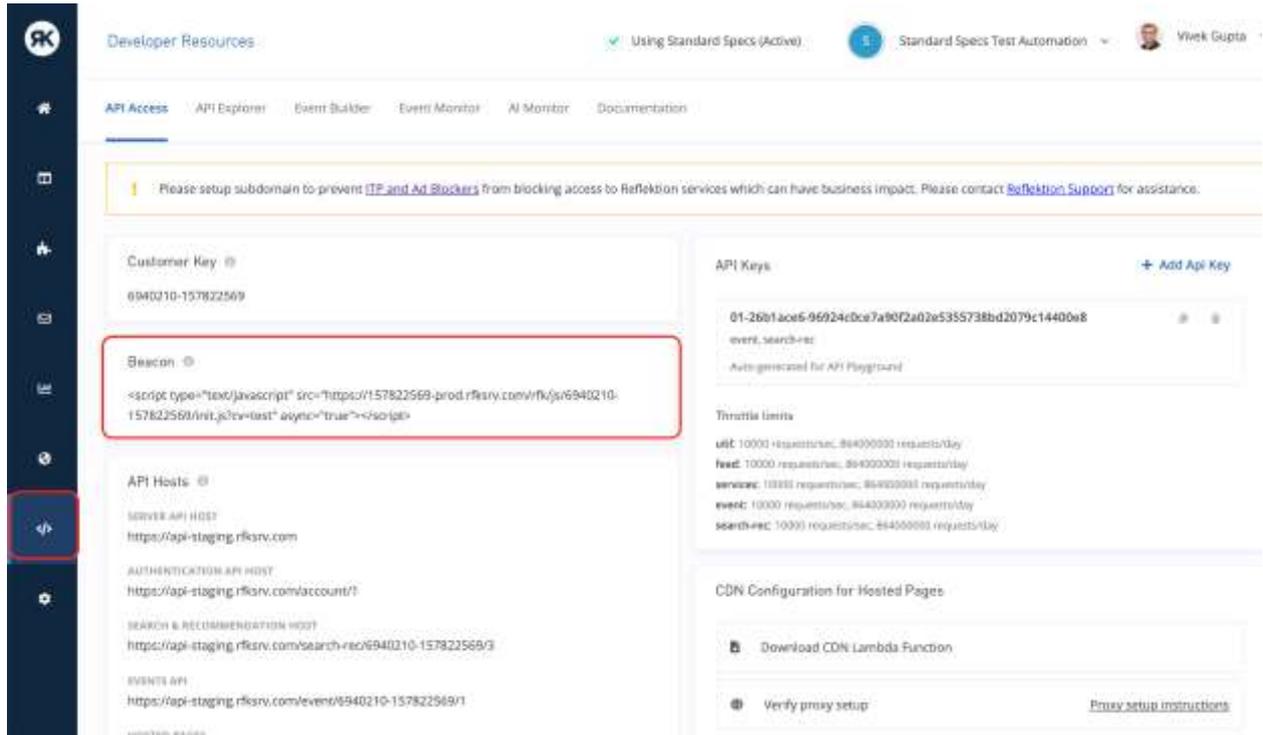
2.2 Sending Events to Sitecore Discover using JavaScript

Included with the beacon is the events JavaScript function called `rfk.push()`. Use the JavaScript function to send any events to Sitecore Discover.

The format to send events is as follows:

```
window.rfk = window.rfk || [];
rfk.push(["trackEvent", {<event_object>}, <settings>]);
```

where `trackEvent` is a constant string.

Sitecore Discover manages many complexities that might arise in sending user events. One of the requirements for sending events is to identify a user anonymously. The Sitecore Discover Analytics SDK provides full support for a reliable anonymous visitor id. In addition, it handles many issues for proper reporting like:

- User that moves from a page too quickly

- Network delays might require you to retry

- Send events in batch for optimization

- Tracking user activity on multiple browser windows as separate threads

You can obtain a Sitecore Discover `uuid` at any time after you have included the beacon.

```
var id = rfk.uid();
```

You can request Sitecore Discover to set a `__ruid` cookie and read the `uuid` from the cookie instead of obtaining it from the above function.

Sitecore Discover also allows you to link your own user ids with Sitecore Discover user ids.

2.3 Sending Events to Sitecore Discover using a REST API

There are times when you might choose to or be required to send events via APIs. These include:

1. When you are reporting events from an application.

2. When you want to send certain events through your backend systems. This happens when you capture events on your own and report to your own backend systems, and the backend system is responsible for notifying Sitecore Discover. This is not typical.

3. You do not include the Sitecore Discover beacon on your website and prefer to capture the events on your own and send them via the API. We do not recommend this approach as there are several nuances for managing events reporting that are automatically handled by the Sitecore Discover beacon.

When you use the Sitecore Discover API to send events, you must consider the following:

- **Anonymous User Identifier**: Sitecore Discover creates a temporary user identifier `uuid`, an anonymous id used to track users browsing sites. This anonymous id is available if the Sitecore Discover JavaScript is not present on the customer site. Customers should choose an anonymous identifier that is persistent across multiple user sessions and send it as `user_id` in event payloads. This could be a cookie set for the user. Search/Rec API calls should also include the same `user_id` so that personalization for the user works as expected. This `user_id` is different from the permanent user identifier, such as the internal id or email that is only available upon login.

  Note: The permanent user id that is used upon login is sent as part of the User object if present.

- **pdp:view event**: The Sitecore Discover beacon automatically captures page view events and sends them to the backend. These events are converted to product views based on URI resolution. If the beacon is not present on the site, prepare to send pdp:view events.

- **Client Headers**: Events submitted via the backend REST API do not have the actual HTTP headers of the user browsing the site. In our analytics, client headers such as the client IP address or the user agent are important to perform location or device attribution. You must send these additional attributes about the user while making REST API calls.

Customer Services

Sitecore Discover Services
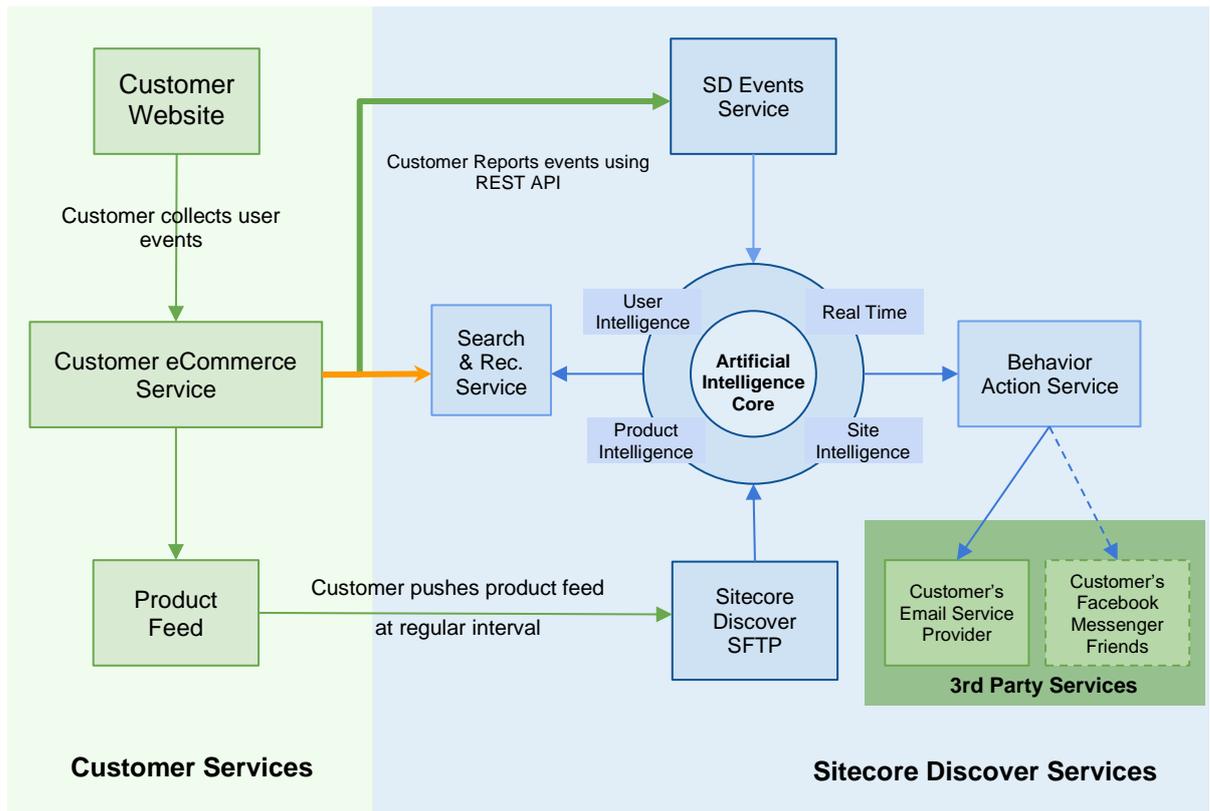
Customers sending these events as a REST API call must include additional attributes in the event. If these attributes are missing, then the integration with Sitecore Discover is not broken.

The following table lists the additional attributes required for API calls:

Name	Description	Type	Required	Business Impact
uuid	SD UUID that is obtained via `rfk.uid()`. We recommended sending this when using API.	String	Yes, either `uuid` or `user_id` is required.	
user_id	Customer's internal user identifier.	String	Yes, either `uuid` or `user_id` is required.	
t	Client (browser) epoch time, in milliseconds.	Number	Yes	
t0	Page load epoch time (when page was loaded), in milliseconds.	Number	No	

Notes on Sitecore Discover API usage

When you use the Sitecore Discover API to report events:

- You must provide **t**, **t0**.

- If you use a combination of the Sitecore Discover JavaScript push function and the Sitecore Discover API to report events, obtain the SD `uuid`, and send it as part of the REST API calls.
  Note: When your website includes the Sitecore Discover beacon, certain events are implicitly and automatically reported on.

- You can obtain the **uuid** from Sitecore Discover JavaScript by calling the function **rfk.uid()** or by reading the `__ruid` cookie.

- Providing the `uuid` allows Sitecore Discover to seamlessly link events reported from any source.

- Either `uuid` or `user_id` must be included in the events. If a customer-specific `user_id` is used, it must be an identifier that is not a PII like email or membership id but something permanent enough so it can be used to identify the same user across multiple sessions (cookie or local storage).

API event example for native app

Native apps send event data by calling the Event REST endpoint. Therefore, they must send additional information like `device`, `geo`, `uuid`, `t`, and `t0`, which otherwise would have been collected by the Sitecore Discover JS component.

```
{
    "type": "widget",
    "name": "appear",
    "t": 1523477704000,
    "t0": 1523477704000,
    "uuid": "reflektion_uuid",
    "user_id": "customer_provided_user_id (one of uuid or user_id must be
provided)",
    "value": {
      "context": {
        "geo": {
          "ip": "10.10.1.1"
        },
        "browser": {
          "device": "mobile",
          "app_type": "native"
        },
        "page": {
          "locale_country": "country code, 2 letters, lowercase, e.g. fr",
          "locale_language": "language code 2 letters, lowercase, e.g. en",
          "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
        }
      },
      "rfkid": "rfkid_6"
    }
}
```

API event example without context object (deprecated)

```
{
    "type": "widget",
    "name": "appear",
    "uuid": "reflektion_uuid",
    "user_id": "customer_provided_user_id (one of uuid or user_id must be
provided)",
    "t": 1523477704000,
    "t0": 1523477704000,
    "ip_address": "",
    "user_agent": "",
    "value": {
      "rfkid": "rfkid_6",
      "locale": {
        "lg": "language code 2 letters, lowercase, e.g. en",
        "co": "country code, 2 letters, lowercase, e.g. fr",
        "cy": "currency code, 3 letters, lowercase, e.g. eur"
      }
    }
}
```

2.4 Events API URL

To obtain the Events API URL, in the Customer Engagement Console, go to **Developer Resources** > **API Access**. The URL is available in the EVENTS API field, as shown in the following example:
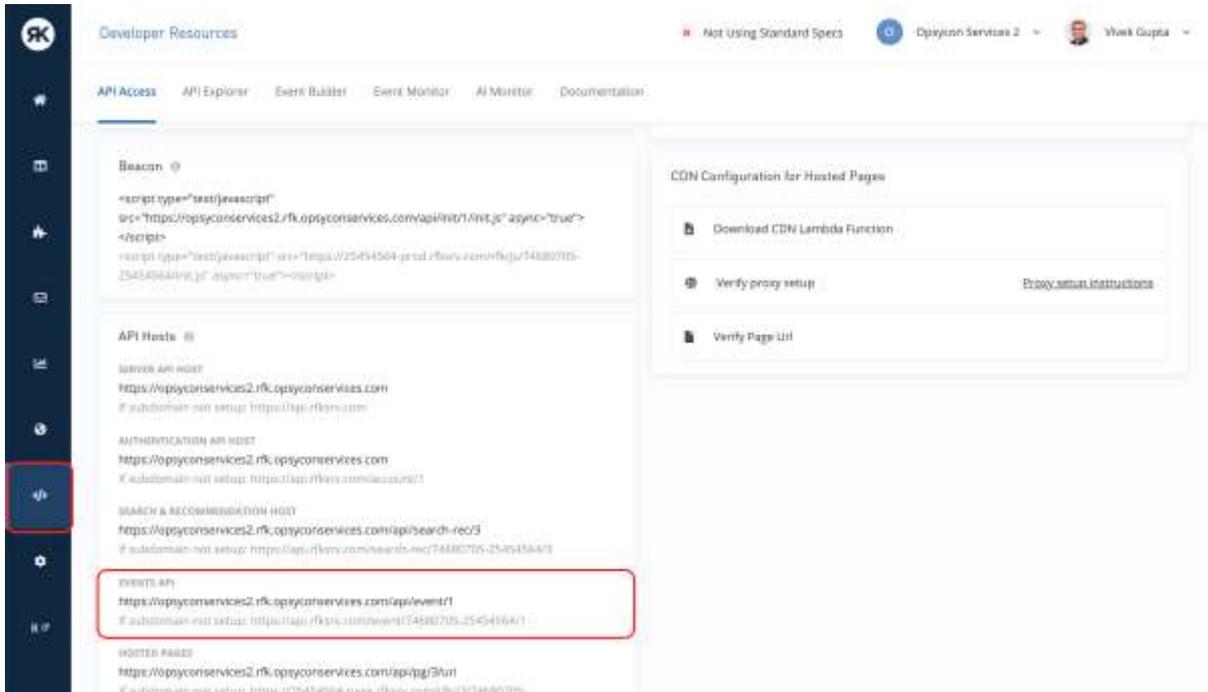
API Request

Method: GET or POST

Required keys:

Key	Data type	Description
data	<JSON string>	JSON that represents the request.

Required keys:

Key	Type	Description
json	Integer	0 or 1 to get a pixel or JSON response

The default response for the method `GET` is pixel unless the key `json` is set to value `1`. The response for method `POST` is a JSON object representing success or failure in logging the event.

Example:

```
GET {EVENT_URL}?data={<event_object>}
```

```
POST {EVENT_URL}
{
   "data": "{<event_object>}"
```

```
}
```

API Request (Deprecated)

Required keys:

Key	Data type	Description
api_key	<base64 string>	An access token provided by Sitecore Discover.
data	<JSON string>	JSON that represents the request.

Optional keys:

Key	Type	Description
json	Integer	0 or 1 to get a pixel or JSON response

The default response for method GET is pixel unless the key json with value 1 presents. The response for method POST is a JSON object representing success or failure in logging event.

Example:

```
GET {EVENT_URL}?data={<event_object>}
Header:
x-api-key: "<your api-key>"
OR
Authentication: Bearer <your access-token>
```

```
POST {EVENT_URL}
{
  "data": "{<event_object>}"
}

Header:
x-api-key: "<your api-key>"
OR
Authentication: Bearer <your access-token>
```

2.5 Required events to send to Sitecore Discover

There are many events that you can push to Sitecore Discover. See Event Type and Event Name for a list of all tracking events. However, some events are required to allow the Sitecore Discover system to learn and have an impact. The following table lists the events that you must push to Sitecore Discover for integration using JavaScript or the Sitecore Discover API.

Event	Event Type and Event Name	Required for JavaScript Integration?	Required for API Integration?
Product added to cart	Event type: a2c Event name: pdp, qview	Yes	Yes
User confirmed an order (purchased items in cart)	Event type: order Event name: confirm	Yes	Yes
User logged in	Event type: user Event name: login	Optional. Highly recommended for cross device personalization.	Optional. Highly recommended for cross device personalization.
Status of cart	Event type: status Event name: cart	Optional	Optional
Product viewed	Event type: view Event name: pdp	Optional	Yes
User views a widget*	Event type: widget Event name: appear	Not needed	Yes
User clicks on a product or suggestions in the widget*	Event type: widget Event name: click	Not Needed	Yes
Product added to wishlist	Event type: a2w Event Name: cart, pdp etc	Optional	Optional

* Sitecore Discover widgets like recommendation widget, full page search widget, etc.

2.6 Developer Resources

Event Builder

Sitecore Discover provides tools within the Customer Engagement Console (CEC) to help you create precise event objects, and to that validates event objects to ensure you are sending them correctly. To access the Event Builder in the CEC, go to **Developer Resources** > **Event Builder**. The following shows an example of the Event Builder:
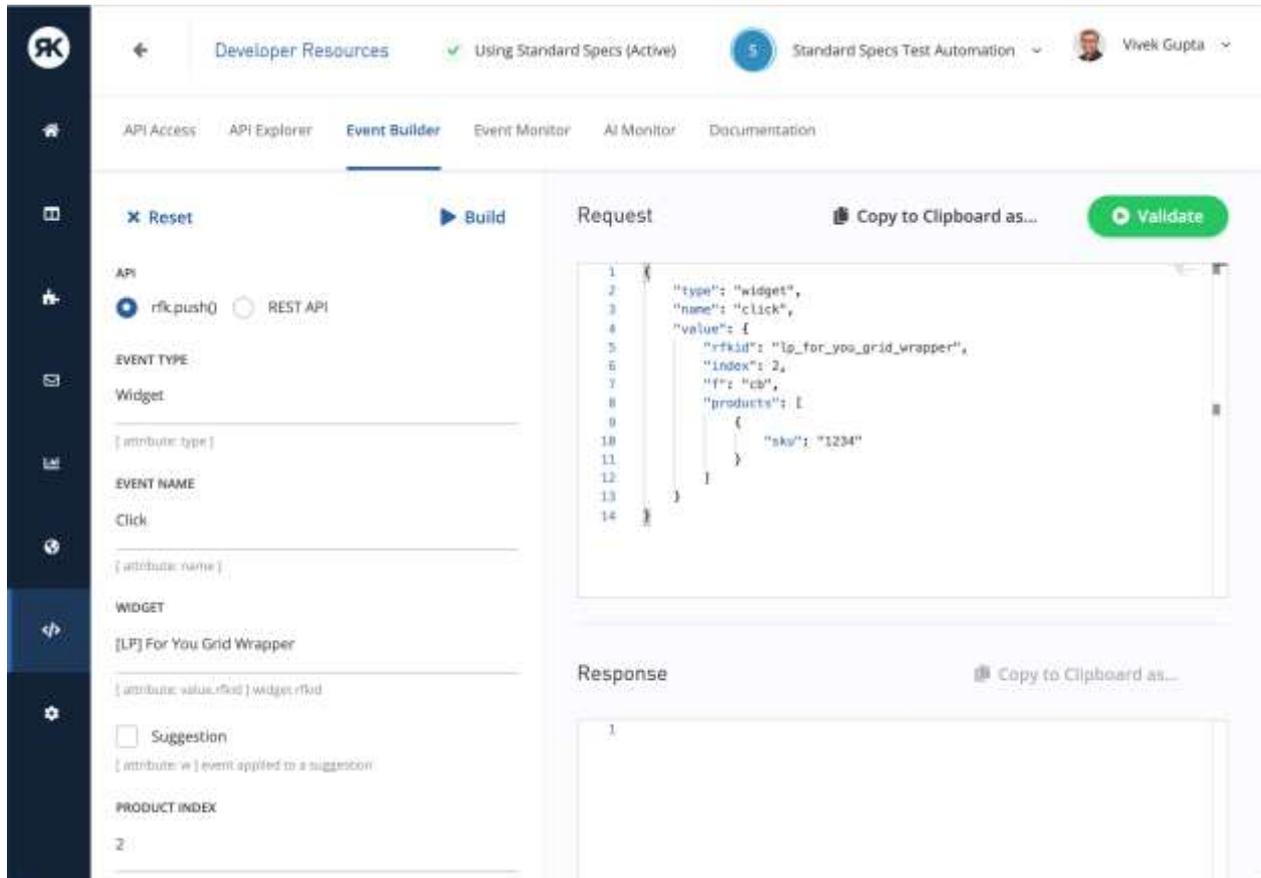
Event Monitor

Sitecore Discover also provides a way to monitor Events that you send from your website. Once you have made the code changes on your website to send various events, in CEC, go to **Developer Resources** > **Event Monitor**, and monitor all the events received in real-time for a given `uuid` / `user_id`. The following is an example of the Event Monitor view in CEC.

Sitecore Discover

Chapter 3   Before you Start: Annotations and

Terms

This chapter describes the type of annotations and terms used in this document.

Chapter 3   Before you Start: Annotations and Terms

3.1 Angle brackets

In the JSON snippets provided in this document, we use **angle brackets <>** to denote the explanation of the value. For example, the following means that the string should represent a content type.

```
"<content_type>"
```

3.2 Type of Object

In this document, we refer to an object as a **dictionary** of key-value pairs. The key is a string, and the data structure of the value can vary according to the key. The following are the available data structure types:

- List

- String

- Number (float or integer).

The following is an example of an object

```
{
  "<key_1>": <value_1>,
  "<key_2>": <value_2>
}
```

3.3 Identifying (customer) load test or internal events

There are many cases when customers need to test traffic that might affect analytics or datasets or do not want to track events from users.

Customers can identify such events in following ways:

- By registering specific IP addresses with Sitecore Discover so that these addresses are tagged as internal/load test events. Contact Sitecore Support if this is the case.

- By including `rfk_flags` when sending event traffic.

Note:
You must ensure that these flags are only sent upon identification of internal or load test traffic. Accidentally flagging real events will result in data loss.

Flag specification

You can use multiple mechanisms to send flags. When you use multiple methods to send flags, there is precedence based on the mechanism. The following table lists mechanisms for sending flags in the order they apply.

Mechanism	Key	Description / Purpose
URL Query Parameter	`rfk_flags`	Specify `rfk_flags` as a query parameter when reporting the event. Example: ``` GET {EVENT_URL}?data={<event_object>}&rfk_flags=cust_loadtest ```

Event Body	`rfk_flags`	Specify `rfk_flags` as part of the event.
		
		Example event object:
		``
		{
		 "type": "order",
		 "name": "confirm",
		 "rfk_flags": "cust_internal",
		  "value": {...}
		}
		``

HTTP Header	`x-rfk-flags`	Specify `x-rfk-flags` in the header.
		
		Curl Example:
		
		``
		curl '{EVENT URL}' \
		  -X POST \
		  -H 'x-rfk-flags: cust_internal' \
		``

| | | ```
-H 'content-type: application/json'
-H 'cache-control: no-cache'  \
-H 'accept: application/json'   \
-H 'authorization: {AUTH_KEY}'
 -d
'{"data":{"type":"view","name":"pdp","value":{}}
}' --compressed
``` |
| Cookie | `__rfk_flags` | Specify `__rfk_flags` in a cookie.<br><br>Curl Example:<br><br>```
curl '{EVENT URL}'  \
  -X POST  \
  --cookie "__rfk_flags=cust_internal"  \
  -H 'content-type: application/json'
  -H 'cache-control: no-cache'  \
  -H 'accept: application/json'   \
  -H 'authorization: {AUTH_KEY}'
  -d
'{"data":{"type":"view","name":"pdp","value":{}}
}' --compressed
``` |

Supported customer flag values are:

Flag	Flag value	Description / Purpose
Customer internal	"cust_internal"	Lets SD system know that the traffic is from internal users. These events are ignored by analytics. Note that these events still count towards your usage of the service.
Customer loadtest	"cust_loadtest"	Lets SD system know the traffic is from load testing. These events are ignored by analytics. Note that these events still count towards your usage of the service.

Sample JS implementation to use a cookie

Customers using the JS implementation can set a flag cookie by adding the following script before the beacon:

```
function setRFKCookie(name, value) {
    value = encodeURIComponent(value);
    value += ';path=/;';
    if (name)
      document.cookie = name + "=" + value;
}

If ( user is identified as internal or load test user ) {
setRFKCookie('__rfk_flags', '<value>')
}
```

where you can use the value `cust_internal` or `cust_loadtest` or both like `cust_internal|cust_loadtest.`

Call the `SetRFKCookie` function only when the user is known to be an internal user, or it is a load test.

Chapter 4 Event specification

This chapter highlights the list of events that customers must send to the Sitecore Discover system for experiences/modules such as Search & Recommendation to work properly and generate meaningful insights into analytics data. Event data is used to generate overall site metrics like views, visits, revenue, orders, and conversions. It is also used to generate Discover-specific attribution like Direct Order Revenue (DOR), Direct Purchase Revenue (DPR), and Click Through Rate (CTR) at the domain, widget type, and widget level.

Customers can integrate with Sitecore Discover using `rfk.push()` or via a RESTful API. The sections in this chapter describe some of the key events and their fields based on Sitecore Discover modules.

4.1 Funnel events

Funnel events are a type of events that are common to a site. There is no Sitecore Discover component involved within the site. Some examples of funnel events might include user activities such as:

- user viewed a product
- user added a product to cart
- user placed an order on the site

4.1.1   Order Event (order:confirm)

An Order event contains details about the purchase a user made on the site. It should include checkout details, individual products that were purchased and their details.

The Order event can also contain an optional user object that is helpful for mapping the user's real id to the RFK cookie.

The Order event is used to:

- calculate overall site level orders and revenue
- calculate revenue related numbers in SD attribution
- calculate orders, units, purchase metrics in product and category analytics
- calculate revenue attribution in keyword analytics
- generate Topk dataset by revenue and Co-bought items

The following table lists the attributes of the Order event:

Name	Description	type	Required	Business Impact
type	Used to identify the type of event. Value is a constant string: "order".	String	Yes	
name	Used to identify the event. Value is a constant string: "confirm"	String	Yes	
value.products	Products array having one or more product objects that the user purchased. For easy processing, the Sitecore Discover system	Array	Yes	Products array and its individual SKUs are used in computing direct attribution numbers in analytics.

	splits the `value.products` array into individual events called `order_split` events. For example, an order event that contains two products results in the following events: One original `order:confirm` event Two `order_split` events, one for each individual SKU purchased in the order.			
value.products[].sku	SKU of the product the user purchased.	String	Yes	SKU is used in calculating direct attribution numbers.
value.products[].price	Unit price of the product at which it was purchased after coupons/discounts are applied. Purchase Amount = price * quantity.	Number	Yes	Price is used to compute the Purchase Amount that is used in calculating Direct Attributions based on product revenue.
value.products[].quantity	Number of units of products purchased in this order. This is used in calculating Purchase Amount (Purchase Amount = price * quantity.)	Number	Yes	This along with price is used in computing direct related attributions.
value.products[].price_original	Original unit price of the purchased product before coupons/discounts are applied.	Number	No	Useful in computing discounts that are part of future analytics.
value.products[].store.id	id of store where an order (BOPIS) is placed.	String	No	Needed when the order is a BOPIS order. This is preferred when various products in a single order are purchased in different

				stores. If all the products are purchased in the same store, it is preferable to pass this information as `checkout.store`.
value.products[].store.group_id	An additional identifier, group identifier, for a set of stores.	String	No	Needed when the stores are organized in a hierarchy
value.products[].shipping_method	Used to identify the type of order. For valid values, refer to [Shipping Methods](#)	String	No	Needed when the order is a BOPIS order or something specific other than the regular order.
value.checkout	Checkout object	Object	Yes	
value.checkout.order_id	Unique identifier that is used to identify this order.	String	Yes	Used to deduplicate an event based on order id.
value.checkout.total	Order total including tax, discount, and shipping.	Number	Yes	Used to calculate Overall Site Revenue and SD revenue attributions.
value.checkout.subtotal	Subtotal before discount, tax, and shipping.	Number	No	Useful to compare SD revenue with other third party web analytics systems as sometimes those reports use subtotal.
value.checkout.store.id	id of store where an order (BOPIS) is placed	String	No	Needed when the order is a BOPIS order. This information is present either in checkout or in individual products. When specified in checkout, it indicates that all the products in the order are placed in this store.
value.checkout.store.group_id	An additional identifier, group identifier, for a set of stores.	String	No	Needed when the stores are organized in a hierarchy.

value.checkout.shipping_method	Used to identify the type of order. For valid values, refer to Shipping Methods	String	No	Needed when the order is a BOPIS order or something specific other than the regular order.
value.context.user	User information object that has a permanent user id like `fbid`, user email or `eid` etc. Refer to User Object.	Object	No	Sites often force users to login while placing an order, so it is convenient to send the user information as part of the order event. The provided information such as `esp, id, fbid, cmid, rpid,` email, `eid` is used to create a mapping between the RFK cookie and a real user id.
value.context.page	Add page specific information (including locale information) under a page object, Refer to Page Object.	Object	No - but required if the site is setup with Locale configuration.	
value.user (deprecated)	User information object that has a permanent user id such as `fbid`, `cmid`, `rpid`, user email or `eid`, and so on.	Object	No	Sites often force users to login while placing an order, so it is convenient to send the user information as part of the order event. The provided information, such as `esp, id, fbid, cmid, rpid,` email, `eid`, is then used to create a mapping between the SD cookie and a real user id.
value.locale (deprecated)	A locale object, see event sample below.	Object	No - but required if the site is setup with Locale configuration.	

Sample Event specification (New format)

```json
{
  "type": "order",
  "name": "confirm",
  "value": {
    "context": {
      "user": {
        "id": "user-1234",
        "email": "abc.def@email.com",
        "eid": "hash_of_email",
        "fbid": "facebook_id",
        "address": {
          "address_line_1": "123 Main Street",
          "address_line_2": "apartment 123",
          "state": "CA",
          "zip": "90210",
          "country": "US"
        }
      },
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "products": [
      {
        "sku": "191258",
        "quantity": 1,
        "price": 11.99,
        "price_original": 19.99,
        "fitment": {
          "ids": [
            "2222"
          ]
        }
      },
      {
        "sku": "23432",
        "quantity": 1,
        "price": 12.99,
        "price_original": 14.99,
        "fitment": {
          "ids": [
            "3333"
          ]
        }
      }
    ],
    "checkout": {
      "order_id": "1234",
      "subtotal": 39.97,
      "total": 50.96
    }
  }
```

```
}
```

Sample Event specification (Old format, deprecated)

```
{
  "type": "order",
  "name": "confirm",
  "value": {
    "products": [
      {
        "sku": "191258",
        "quantity": 1,
        "price": 11.99,
        "price_original": 19.99,
        "fitment": {
          "ids": [
            "2222"
          ]
        }
      },
      {
        "sku": "23432",
        "quantity": 1,
        "price": 12.99,
        "price_original": 14.99,
        "fitment": {
          "ids": [
            "3333"
          ]
        }
      }
    ],
    "checkout": {
      "order_id": "1234",
      "subtotal": 39.97,
      "total": 50.96
    },
    "user": {
      "id": "user-1234",
      "email": "Abc.Def@email.com",
      "eid": "hash_of_email",
      "fbid": "facebook_id",
      "cmid": "cheetah email id",
      "rpid": "responsys email id",
      "address": {
        "address_line_1": "123 Main Street",
        "address_line_2": "apartment 123",
        "state": "CA",
        "zip": "90210",
        "country": "US"
      }
    },
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
```

```
    }
}
```

4.1.2   Add to Cart Event (a2c:<page title>)

This event must be sent when a user adds a product to the shopping cart and is required to compute cart abandonment metrics. If you do not send this event, Sitecore Discover category and product analytics cannot report cart abandonment metrics.

The following table lists the attributes of the Add to Cart event:

Name	Description	type	Required	Business Impact
type	Type of the event: "a2c"	String	Yes	
name	Name of the event, usually it is the name of the page where the event happened. Sample values are: "home", "pdp", "category", "cart", "qview" etc.	String	Yes	
value.products	Products array having a single product that was added to cart.	Array	Yes	
value.products[].sku	SKU of the product that the user added to cart.	String	Yes	
value.products[].price	Price of the product that is added to cart.	Float	Yes	Price and quantity are used to calculate the cart amount that is used in Abandoned Cart Amount Metric.

value.products[].quantity	Number of units of products that a user added to cart.	Integer	Yes	
value.products[].fitment	Array of fitment objects. Refer to products, fitments for more details.	Array	No - only required for customers that support fitments.	Used for computing fitment analytics.
value.context.page	Add page specific information (including locale information) under page object. Refer to Page Object.	Object	No - but required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see event sample below.	Object	No - but required if the site is setup with Locale configuration.	

Sample Event specification (New format, Context Object)

```json
{
  "type": "a2c",
  "name": "home",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "products": [
      {
        "sku": "191258",
        "quantity": 1,
        "price": 11.99,
        "fitment": {
          "ids": [
            "3333"
          ]
        }
      }
    ]
  }
}
```

Sample Event specification (Old format, deprecated)

```json
{
  "type": "a2c",
  "name": "home",
  "value": {
    "products": [
      {
        "sku": "191258",
        "quantity": 1,
        "price": 11.99,
        "fitment": {
          "ids": [
            "3333"
          ]
        }
      }
    ],
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.1.3　Add To Wishlist Event (a2w:<page title>) [Coming Soon]

This event must be sent when a user adds a product into a wish list. This event is used in computing future analytics to compute user interests.

The following table lists the properties of the Add to Wishlist event:

Name	Description	type	Required	Business Impact
type	Type of the event: "a2w"	String	Yes	
name	Name of the event, usually it is the name of the page where the event happened. Example values are: "home", "pdp", "category", "cart", "qview", and so on.	String	Yes	
value.products	Products array having a single product that was added to wish list.	Array	Yes	

value.products[].sku	SKU of the product that the user added to the wish list.	String	Yes	
value.products[].price	Price of the product added to the wish list.	Float	Yes	
value.products[].quantity	Number of units of products that were added to the wish list by the user.	Integer	Yes	
value.products[].fitment	Array of fitment objects. Refer to products and fitments for details.	Object	No - but required if the site has fitments.	
value.context.page	Adds page-specific information (including locale information) under page object. Refer to Page Object.	Object	No - but required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see event sample below.	Object	No - but required if the site is setup with Locale configuration.	

Sample Event specification (New format, Context object)

```
{
  "type": "a2w",
  "name": "home",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "products": [
      {
        "sku": "191258",
        "fitment": {
          "ids": [
```

```
            "3333"
        ]
    }
  }
]
}
}
```

Sample Event specification (old format, deprecated)

```
{
  "type": "a2w",
  "name": "home",
  "value": {
    "products": [
      {
        "sku": "191258",
        "fitment": {
          "ids": [
            "3333"
          ]
        }
      }
    ],
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.1.4   Page Details View Event (view:pdp)

The Sitecore Discover beacon usually sends page visits. However, if the beacon is absent or if specific information like fitment is required, then you must send this event when a user views a product on the site.

This event is used in:

- View metrics in product and category analytics

- Generated datasets like top-viewed, co-viewed and view-buy

- Search ranking based on views.

The following table lists the properties of the Page Details View event:

Name	Description	type	Required	Business Impact
type	Type of the event: "view"	String	Yes	

name	Name of the event, usually it is the type of the pdp page: "pdp", "qview" etc.	String	Yes	
value.products	Products array having a single product that was viewed by the user.	Array	Yes	
value.products[].sku	SKU of the product that the user viewed.	String	Yes	SKU is used in attributing views to a specific product in the catalog.
value.products[].fitment	Array of fitment objects. Refer to products and fitments for details.	Array	No - only requirement for customers that support fitments.	Used in computing fitment analytics.
value.context.page	Adds page-specific information (including locale information) under page object. Refer to Page Object.	Object	No - but required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see above event sample.	Object	No - but required if the site is setup with Locale configuration.	

Sample Event specification (New format, context object)

```
{
  "type": "view",
  "name": "pdp",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "products": [
      {
        "sku": "191258",
```

```
        "fitment": {
          "ids": [
            "2222"
          ]
        }
      }
    ]
  }
}
```

Sample Event specification (Old format, deprecated)

```
{
  "type": "view",
  "name": "pdp",
  "value": {
    "products": [
      {
        "sku": "191258",
        "fitment": {
          "ids": [
            "2222"
          ]
        }
      }
    ],
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.1.5   Page View Event (view:page)

This event must be sent when a user views a page on the site. Sitecore Discover beacon usually sends page visits but if the beacon is absent, then the customer must send this event.

This event is used in
- Overall page view metrics
- Search Ranking based on views

The following table lists the properties of the Page View event:

Name	Description	type	Required	Business Impact
type	Type of the event: "view"	string	yes	

name	Name of the event: "page".	string	yes	
value.context. page.uri	URI of the page that was the user visited.	string	yes	
value.context. page.title	The title of the page.	string	no	
value.context. page.referrer	Channel referrer that helped to click on this URL.	string	yes - if the page URI was clicked from a referrer channel.	
value.context. page	A locale object, see above event sample.	object	no - required if the site is setup with Locale configuration .	

Sample Event specification (New format, context object)

```
{
  "type": "view",
  "name": "page",
  "value": {
    "context": {
      "page": {
        "uri": "/rfk/collection/handbags",
        "title": "Handbags",
        "referrer": "https://www.google.com/",
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    }
  }
}
```

4.1.6   User Login Event (user:login)

This event must be sent when a user logs in to the system. This event is used in linking a real user id to a Sitecore Discover cookie to help in more advanced user personalization use cases like cross-device personalization.

The following table lists the properties of the User Login event:

Name	Description	type	Required	Business Impact
type	Type of the event: `"user"`	String	Yes	
name	Name of the event: `"login"`	String		
value.context. user	User information object that has a permanent user id like `fbid`, `cmid`, `rpid`, user email or `eid`, and so on. Refer to the User Object.	Object	Yes	Information used to build a user profile and map temporary id like `uuid` or `user_id` to the user's permanent identifier. This user information and the mappings it provides enables cross device personalization.
value.context. page	Add page specific information (including locale information) under page object. Refer to Page Object.	Object	No - but required if the site is setup with Locale configuration.	
value.user(de precated)	User information object that has a permanent user id `like fbid, cmid, rpid`, user email or `eid` etc.	Object	Yes	
value.user.ad dn_attributes (deprecated)	Additional user attributes, such as gender, preference, store code, and so on, that helps in personalization. This could include membership type, loyalty program id, user profession etc.	Object	No	
value.user.ad dress (deprecated)	Physical address of the user to derive location affinity.	Object	No	

Sample Event specification (New format, context object)

```json
{
  "type": "user",
  "name": "login",
  "value": {
    "context": {
      "user": {
        "id": "user-1234",
        "email": "abc.def@email.com",
        "eid": "hash_of_email",
        "fbid": "facebook_id",
        "address": {
          "address_line_1": "123 Main Street",
          "address_line_2": "apartment 123",
          "state": "CA",
          "zip": "90210",
          "country": "US"
        },
        "gender": "female",
        "groups": [
          "group1",
          "group2"
        ],
        "addn_attributes": {
          "email_subscriber": "True",
          "preferred_sizes": [
            "S",
            "M",
            "32W",
            "30L"
          ],
          "home_store_code": "4321"
        }
      },
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    }
  }
}
```

Sample Event specification (Old format, deprecated)

```json
{
  "type": "user",
  "name": "login",
  "value": {
    "user": {
      "id": "user-1234",
      "email": "abc.def@email.com",
      "eid": "hash_of_email",
      "fbid": "facebook_id",
      "address": {
        "address_line_1": "123 Main Street",
```

```
            "address_line_2": "apartment 123",
            "state": "CA",
            "zip": "90210",
            "country": "US"
        },
        "gender": "female",
        "groups": [
            "group1",
            "group2"
        ],
        "addn_attributes": {
            "email_subscriber": "True",
            "preferred_sizes": [
                "S",
                "M",
                "32W",
                "30L"
            ],
            "home_store_code": "4321"
        }
    },
    "locale": {
        "lg": "language code 2 letters, lowercase, e.g. en",
        "co": "country code, 2 letters, lowercase, e.g. fr",
        "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.1.7   User Info Event (user:info)

This event must be sent whenever user information is updated or when user information is available to be sent like user information is accessed in a customer system. This event is used in linking a real user id to a RFK id cookie to help in more advanced use cases such as cross device personalization.

The following table lists the properties of the User Info event:

Name	Description	type	Required	Business Impact
type	Type of the event: "user"	string	yes	
name	Name of the event: "info"	string		
value.context. user	User information object that has a permanent user id like `fbid`, `cmid`, `rpid`, user email or `eid` etc. Refer to the User Object.	object	yes	The information is used to build a user profile and to map a temporary id like `uuid` or `user_id` to the

				user's permanent identifier. This user information and the mappings it provides enables cross device personalization.
value.context. page	Add page specific information (including locale information) under page object. Refer to Page Object.	object	no - but required if the site is setup with Locale configuration.	

Sample Event specification (New format, context object)

```json
{
  "type": "user",
  "name": "info",
  "value": {
    "context": {
      "user": {
        "id": "user-1234",
        "email": "abc.def@email.com",
        "eid": "hash_of_email",
        "fbid": "facebook_id",
        "address": {
          "address_line_1": "123 Main Street",
          "address_line_2": "apartment 123",
          "state": "CA",
          "zip": "90210",
          "country": "US"
        },
        "gender": "female",
        "groups": [
          "group1",
          "group2"
        ],
        "addn_attributes": {
          "email_subscriber": "True",
          "preferred_sizes": [
            "S",
            "M",
            "32W",
            "30L"
          ],
          "home_store_code": "4321"
        }
      },
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
```

```
        }
      }
}
```

4.1.8   Cart Status Event (status:cart)

This event must be sent when the user visits the cart page or modifies the shopping cart. This is helpful in calculating the cart abandonment metrics and is an alternate way to send cart information instead of using the a2c event.

The following table lists the properties of the Cart Status event:

Name	Description	type	Required	Business Impact
type	Type of the event: "`status`"	String	Yes	
name	Name of the event: "`cart`"	String		
value.products	Products array having one or more product objects that were in the cart. To facilitate processing, the SD system splits the `value.products` array into individual events called "cart_status_split" events. If there is a cart status event with two products, SD generates • One original status:cart event • And two "cart_status_split" events, one for each individual SKU in the cart.	Array	Yes	Products array and its individual SKUs are used in computing cart related analytics.
value.products[].sku	SKU of the product that was in the cart.	String	Yes	The product SKU is used in calculating abandoned cart metrics.

value.products[]. price	Unit price of the product that is added to cart. Abandonment Amount = price * quantity.	Number	No	Price is used to compute the abandonment Amount. If not provided, the listing price is used instead.
value.products[]. quantity	Number of units of products that were added to cart.	Number	Yes	The number of units and price are used to compute abandonment amount.
value.products[]. fitment	Array of fitment objects. Refer to products and fitments for details.	Array	No - only required for customers that support fitments.	Used in computing fitment analytics
value.context.page	Add page specific information (including locale information) under page object. Refer to Page Object.	Object	No - only required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see event sample below.	Object	No – only required if the site has multiple locales.	

Sample Event specification (New format, context object):

```
{
  "type": "status",
  "name": "cart",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
```

```
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "products": [
      {
        "sku": "191258",
        "quantity": 1,
        "price": 11.99,
        "fitment": {
          "ids": [
            "3333"
          ]
        }
      },
      {
        "sku": "2402",
        "quantity": 1,
        "price": 12.99,
        "fitment": {
          "ids": [
            "3333"
          ]
        }
      }
    ]
  }
}
```

Sample Event specification (Old format, deprecated):

```
{
  "type": "status",
  "name": "cart",
  "value": {
    "products": [
      {
        "sku": "191258",
        "quantity": 1,
        "price": 11.99,
        "fitment": {
          "ids": [
            "3333"
          ]
        }
      },
      {
        "sku": "2402",
        "quantity": 1,
        "price": 12.99,
        "fitment": {
          "ids": [
            "3333"
          ]
        }
      }
    ],
```

```
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.2 Recommendation events

This section describes a list of all the events that must be sent while interacting with Sitecore Discover's recommendation widgets.

4.2.1   Widget Appear Event (widget:appear)

This event must be sent when the user sees or views a recommendation widget on a page. Often the user does not scroll all the way down to see the widget. For analytics to report the correct attribution numbers, this event should only be sent when the widget is within the user's view port.

This event is used to calculate:

- Sitecore Discover view assisted attributions, such as view assisted revenue, view assisted orders, and view assisted conversions at domain, widget type, and widget levels.

- CTR (click/views) number for site, widget type, or widget.

The following table lists the properties of the Widget Appear event:

Name	Description	Type	Required	Business Impact
type	Event type that is used to identify the event. Value is a constant string: `"widget"`	String	Yes	
name	Event name is used to identify the event. Value is a constant string: `"appear"`	String	Yes	
value.rfkid	Used to associate this event to a widget that is set up in CEC.	Sting	Yes	Should match the corresponding `rfkid` setup in CEC. If not provided or if the wrong `rfkid` is sent, then all RFK attribution numbers are missing.
value.f (deprecated)	Called rfk track feature, for recommendation widget it should be set to "rw".	String	Yes	
value.context.page	Adds page-specific information (including locale information) under page object. Refer to Page Object.	Object	No -- but required if the site is setup with Locale	

			configuratio n.	
value.locale (deprecated)	A locale object, see above event sample.	Object	No - required if the site has multiple locales.	

Sample Event specification (New format, context object):

```
{
  "type": "widget",
  "name": "appear",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "Widget rfkid goes here",
    "f": "rw"
  }
}
```

Sample Event specification (Old format, deprecated):

```
{
  "type": "widget",
  "name": "appear",
  "value": {
    "rfkid": "Widget rfkid goes here",
    "f": "rw",
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.2.2 Widget Product Click Event (widget:click)

This event must be sent when the user clicks on a product in the recommendation widget. Most clicks in a recommendation widget would be product clicks but it might also include next or previous clicks.

The Product Click event is used to calculate the following:

- Sitecore Discover click assisted attributions, such as click assisted revenue, click assisted orders, and click assisted conversions at domain, widget type, and widget level.

- CTR (click/views) number for site, widget type, or widget.

- Direct attributions, such as DOR, DPR, DO, and so on.

The following table lists the properties of the Widget Product Click event:

Name	Description	type	Required	Business Impact
type	Event type that is used to identify the event. Value is a constant: `"widget"`	String	Yes	
name	Event name is used to identify the event. Value is a constant string `"click"`	String	Yes	
value.rfkid	Used to associate this event with a widget that is set up in CEC.	String	Yes	Should match the corresponding `rfkid` setup in CEC. If not provided, or of the wrong `rfkid` is sent, then all the SD attribution numbers are missing.
value.f (deprecated)	It is called rfk track feature, for recommendation widget it should be set to "rw"	String	Yes	
value.index	Position of the product on which user clicked in a widget. Indexing starts with 0.	Integer	No	To be used to compute future advanced analytics.
value.products	Products array having a single product object that the user clicked in a widget.	Array	Yes	
value.products[].sku	SKU of the product the user clicked in a widget.	String	Yes	Used in computing Direct attributions.

value.context.page	Adds page-specific information (including locale information) under page object. Refer to Page Object.	Object	No - but required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see above event sample.	Object	No - required if the site has multiple locales.	

Sample Event specification (New format, context object):

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": {
      "fitment": {
        "ids": [
          "fit-id1",
          "fit-id2"
        ]
      },
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "Widget rfkid goes here",
    "click_type": "product",
    "f": "rw",
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ]
  }
}
```

Sample Event specification (Old format, deprecated):

```
{
  "type": "widget",
```

```
  "name": "click",
  "value": {
    "context": {
      "fitment": {
        "ids": [
          "fit-id1",
          "fit-id2"
        ]
      }
    },
    "rfkid": "Widget rfkid goes here",
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ],
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.2.3   Widget Click- A2C button click

A user clicks on the add-to-cart (a2c) button embedded in a Sitecore Discover widget.

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": "Refer to Default Context",
    "rfkid": "rfkid of Sitecore Discover Widget",
    "click_type": "a2c",
    "click_text": "Add to cart",
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ]

  }
}
```

Note
Along with this event, continue to send regular a2c events for the product added to cart.

4.2.4 Widget Click – Quick View/View Details/Shop Now Button

A user clicks on a button embedded in a Sitecore Discover widget that opens a modal/dialog showing additional details about a product.

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": "Refer to Default Context",
    "rfkid": "rfkid of Sitecore Discover Widget",
    "click_type": "view",
    "click_text": "Quick Shop/View Details",
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ]
  }
}
```

4.2.5 Widget Click - "Add all to cart" Button

A user clicks on the "Add all to cart" button embedded inside a Sitecore Discover widget.

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": "Refer to Default Context",
    "rfkid": "rfkid of Sitecore Discover Widget",
    "click_type": "all_a2c",
    "click_text": "Add All to cart",
    "products": [
      {
        "sku": "191258"
      },
      {
        "sku": "191259"
      }
    ]
  }
}
```

Note
Along with this event, continue to send regular a2c events for the product added to cart.

4.3 Full Page Search Events

4.3.1   Widget Appear Event (widget:appear) [track:appear, old convention]

This event must be sent when the user does a full-page search (by typing a keyword and hitting enter) and search results are displayed to them.

- This is used to calculate Sitecore Discover view-assisted attributions like view-assisted revenue, view-assisted orders, and view-assisted conversions at Domain, Widget type, and Widget level.

- It is used to calculate CTR (click/views) number for Site or Widget type or Widget which is an important metric to track.

Name	Description	type	Required	Business Impact
type	Event type that is used to identify the event. Value is a constant string "widget"	String	Yes	
name	Event name is used to identify the event. Value is a constant string "appear"	String	Yes	
value.rfkid	It is used to associate this event to a widget that is setup in CEC.	String	Yes	This should match the corresponding `rfkid` setup in CEC. If not provided or wrong `rfkid` is sent, then all the SD attribution numbers will be missing.
value.f (deprecated)	It is called rfk track feature, for search results widget it should be set to "sp"	String	No	
value.context.page	Add page specific information (including locale information) under page object, Refer to [Page Object](#).	Object	No, but required if the site is setup with Locale configuration.	
value.locale	A locale object, see above	Object	No, Required	

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(deprecated)	event sample.		if the site has multiple locales.	

Sample Event specification (New format, context object):

```
{
  "type": "widget",
  "name": "appear",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "Widget rfkid goes here",
    "f": "sp"
  }
}
```

Sample Event specification (Old format, deprecated):

```
{
  "type": "widget",
  "name": "appear",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "Widget rfkid goes here",
    "f": "sp"
  }
}
```

4.3.2   Widget Click Event (widget:click)

This event must be sent when the user clicks anywhere in the Sitecore Discover Search widgets. Clicks can happen on a product, a facet, or **Next Page** links. This is used to calculate Sitecore Discover click assisted attributions like Click assisted Revenue, Click assisted Orders and Click assisted Conversions at domain, widget type, and widget level:

- It is used to calculate CTR (click/views) number for Site or Widget type or Widget which is an important metric to track.

- When the click is a product click, then the SKU is used to calculate attribution metrics like Direct Purchase Revenue (DPR), Direct Order Revenue (DOR), Direct Orders (DO), and Direct Purchase Units (DPU) metrics. It is also used to generate Keyword Product Analytics that is displayed on the Keyword Details page.

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- "kw" (Original Keyword) & "m" Modified Keyword are used in keyword attributions like Search Clicks, Click Revenue, Direct Purchase Revenue (DPR), Direct Order Revenue (DOR), Direct Orders (DO), and Direct Purchase Units (DPU) etc.

Name	Description	type	Required	Business Impact
type	Event type that is used to identify the event. Value is a constant string "widget".	String	Yes	
name	Event name is used to identify the event. Value is a constant string "click"	String	Yes	
value.rfkid	It is used to associate this event to a widget that is set up in CEC.	String	Yes	This should match the corresponding `rfkid` setup in CEC. If not provided or wrong `rfkid` is sent, then all the SD attribution numbers will be missing.
value.f (deprecated)	It is called rfk track feature, for search results/ search page widget it should be set to "sp"	String	Yes	
value.index	Position of the product on which user clicked in a widget. Indexing start with 0.	number	No	Used in computing future advanced analytics.
value.kw	Original Keyword or search text that user entered in the search box.	String	Yes	Calculate attribution to Keyword entered by the user.
value.m	modified keyword that was returned as part of search response.	String	No, required if backend returned modified keyword.	Calculate attribution to modified keyword returned by Search API.

value.click_type	Some customers embed a2c or quick view or other buttons inside search results. Click type should include the type of the button/link that was clicked in search results. Example values are "a2c"/"qview"	String	No	This helps to understand the action the user took on search results. It will be used in future analytics to show the number of times users clicked on a specific link/button type, something like a heat map.
value.click_text	Label value associated with the above click type. Example values are "Add to Cart" / "Show" / "Quick View"	String	No	
value.products	Products array having a single product object that the user clicked in a widget.	Array	Yes	
value.products[].sku	SKU of the product the user clicked in a widget.	String	Yes,	SKU is used in calculating direct attributions.
value.context.page	Add page specific information (including locale information) under page object, Refer to [Page Object]().	Object	No, but required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see above event sample.	Object	No, required if the site has multiple locales.	

Sample Event specification (New format, context object):

```json
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "Widget rfkid goes here",
    "f": "sp",
    "kw": "original keyword/search term",
    "m": "modified/corrected keyword/search term",

    "click_type": "product"
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ]
  }
}
```

Sample Event specification (Old format, deprecated):

```json
{
  "type": "widget",
  "name": "click",
  "value": {
    "rfkid": "Widget rfkid goes here",
    "f": "sp",

    "kw": "original keyword/search term",
    "m": "modified/corrected keyword/search term",

    "click_type": "product",
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ],
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.3.3   Widget Click- A2C button click

A user clicks on an a2c button embedded in a Sitecore Discover widget.

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": "Refer to Default Context",
    "rfkid": "rfkid of Sitecore Discover Widget",
    "kw": "original keyword/search term",
    "m": "modified/corrected keyword/search term",
    "click_type": "a2c",
    "click_text": "Add to cart",
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ]

  }
}
```

Note

Along with this event, continue to send regular a2c events for the product added to cart.

4.3.4   Widget Click - Quick View/View Details/Shop Now Button

A user clicks on a button embedded inside Sitecore Discover search results or Product Listing results widget that leads to opening a modal/dialog showing additional details of a product.

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": "Refer to Default Context",
    "rfkid": "rfkid of Sitecore Discover Widget",

    "kw": "original keyword/search term",
    "m": "modified/corrected keyword/search term",
    "click_type": "view",
    "click_text": "Quick Shop/View Details",
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ]
  }
}
```

4.3.5   Widget Click - "Add all to cart" Button

User clicks on the "Add all to cart" button embedded in a Sitecore Discover widget, resulting in adding more than one product to the cart.

```json
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": "Refer to Default Context",
    "rfkid": "rfkid of Discover Widget",

    "kw": "original keyword/search term",
    "m": "modified/corrected keyword/search term",
    "click_type": "all_a2c",
    "click_text": "Add All to cart",
    "products": [
      {
        "sku": "191258"
      },
      {
        "sku": "191259"
      }
    ]
  }
}
```

Note
Along with this event continue to send regular a2c events for the product added to cart.

4.4 Preview Search Events

4.4.1 Widget Appear Event (widget:appear)

This event must be sent when the preview search widget is shown to a user either by clicking on the search box or hovering over it. This event is used to calculate the following metrics in analytics:

- View attributions at Domain, Widget Type, and Widget levels
- Click through rate

Name	Description	type	type	Business Impact
type	Event type that is used to identify the event. Value is a constant string "widget"	String	Yes	
name	Event name is used to identify the event. Value is a constant string "appear"	String	Yes	
value.rfkid	It is used to associate this event to a widget that is setup in CEC.	String	Yes	This should match the corresponding `rfkid` setup in CEC. If not provided or wrong `rfkid` is sent, then all the SD attribution numbers will be missing.
value.f (deprecated)	It is called rfk track feature, for search results widget it should be set to "sb" (Search Bar)	String	Yes	
value.context. page	Add page specific information (including locale information) under page object, Refer to Page Object.	Object	No, but required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see above event sample.	Object	No, required if the site has	

			multiple locales.	

Sample Event specification (New format, context object):

```
{
  "type": "widget",
  "name": "appear",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "Widget rfkid goes here",
    "f": "sb"
  }
}
```

Sample Event specification (Old format, deprecated):

```
{
  "type": "widget",
  "name": "appear",
  "value": {
    "rfkid": "Widget rfkid goes here",
    "f": "sb",
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.4.2 Widget Click Event - Top category/brand click (widget:click)

This event must be sent when a user clicks on the Top Category or Brand that shows up on the preview search widget. This is also considered a keywordless feature i.e., what the user sees in preview search before typing any text in the input box. This event is used in future analytics to:

- Calculate Keyword/ Keywordless attribution to Top Category/ Top Brand Section of this widget.

- Calculate top Categories or Brands that were clicked in this widget.

- Calculate Sitecore Discover click assisted attribution in widget and keyword analytics.

Name	Description	Type	Required	Business Impact
type	Event type that is used to identify the event. Value is a constant string `"widget"`	String	Yes	
name	Event name is used to identify the event. Value is a constant string `"click"`	String	Yes	
value.rfkid	It is used to associate this event to a widget that is	String	Yes	This should match the corresponding `rfkid` setup

	setup in CEC.			in CEC. If not provided or wrong `rfkid` is sent, then all the SD attribution numbers will be missing.
value.f (deprecated)	It is called rfk track feature, for search results widget it should be set to "`sb`" (Search Bar)	String	Yes	
value.w	A constant string "suggestion" to denote that click happened in suggestion area of preview search widget	String	Yes	
value.text	text of the link that was clicked.	String	Yes	Calculate attribution to a specific link text that the user clicks in a preview search widget.
value.type	Type of the link that was clicked like "`trending_category`" or "`trending_brand`" etc.	String	Yes	Calculate attribution to a specific type of link that the user clicks in a preview search widget.
value.index	Position or index of the link that was clicked. Indexing starts from 0.	Integer	No	Useful in computing advanced analytics.
value.context.page	Adds page-specific information (including locale information) under page object, Refer to [Page Object]().	Object	No, but required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see above event sample.	Object	No, but required if the site has multiple locales.	

Sample Event specification (New format, context object):

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "f": "sb",
    "rfkid": "rfkid_6",
    "w": "suggestion",
    "text": "Tops",
    "type": "trending_category",
    "index": "1"
  }
}
```

Sample Event specification (Old format, deprecated):

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "f": "sb",
    "rfkid": "rfkid_6",
    "w": "suggestion",
    "text": "Tops",
    "type": "trending_category",
    "index": "1",
    "locale": {
        "lg": "language code 2 letters, lowercase, e.g. en",
        "co": "country code, 2 letters, lowercase, e.g. fr",
        "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.4.3   Widget Click Event - Suggested Keyphrase Click (widget:click)

This event must be sent when a user clicks on a suggested keyphrase in a Preview Search Widget. This event is used in future analytics to:

- Calculate Keyword/ Keywordless attribution to Suggested Keyword section of the widget.

- Calculate top Suggested Keyphrases clicked by users in this widget.

- Calculate Sitecore Discover click assisted attribution in widget and keyword analytics

Name	Description	type	Required	Business Impact
type	Event type that is used to identify the event. Value is a constant string `"widget"`	String	Yes	
name	Event name is used to identify the event. Value is a constant string `"click"`	String	Yes	
value.rfkid	Used to associate this event to a widget that is set up in CEC.	String	Yes	This should match the corresponding `rfkid` setup in CEC. If not provided or wrong `rfkid`

				is sent, then all the SD attribution numbers will be missing.
value.f (deprecated)	It is called rfk track feature, for search results widget it should be set to "sb" (Search Bar)	String	Yes	
value.w	A constant string "suggestion" to denote that click happened in suggestion area of preview search widget	String	Yes	
value.text	text of the suggestion link that was clicked.	String	Yes	Calculate attribution to a specific link text that the user clicks in a preview search widget.
value.type	Type of the link that was clicked in this case it would be "keyphrase"	String	Yes	Calculate attribution to a specific type of link that the user clicks in a preview search widget.
value.index	Position or index of the link that was clicked. Indexing starts from 0.	Integer	No	Useful in computing advanced analytics.
value.kw	Original Keyword or search text that user entered in the search box.	String	Yes	Used in calculating keyword attributions to the text entered by the user.
value.m	modified keyword that was returned as part of search response.	String	Yes	Calculate attribution to modified keyword returned by Search API.
value.context.page	Adds page-specific information (including locale information) under page object, Refer to Page Object.	Object	No, but required if the site is setup with Locale configurati	

			on.	
value.locale (deprecated)	A locale object, see above event sample.	Object	No, but required if the site has multiple locales.	

Sample Event specification (New format, context object):

```json
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "rfkid_6",
    "w": "suggestion",
    "kw": "jew",
    "m": "jewelry",
    "text": "fine jewelry",
    "type": "keyphrase",
    "index": "2"
  }
}
```

Sample Event specification (Old format, deprecated):

```json
{
  "type": "widget",
  "name": "click",
  "value": {
    "rfkid": "rfkid_6",
    "w": "suggestion",
    "kw": "jew",
    "m": "jewelry",
    "text": "fine jewelry",
    "type": "keyphrase",
    "index": "2",
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.4.4 Widget Click Event - Suggested Category/Brand Click (widget:click)

This event must be sent when a user clicks on a suggested Category/Brand in the Preview Search Widget.

This event is used in future analytics to:

- Calculate Keyword/ Keywordless attribution to Suggested Category/Brand section of the widget. (Future)

- Calculate top Suggested Category/Brand clicked by users in this widget. (Future)

- Calculate Sitecore Discover click assisted attribution in widget and keyword analytics.
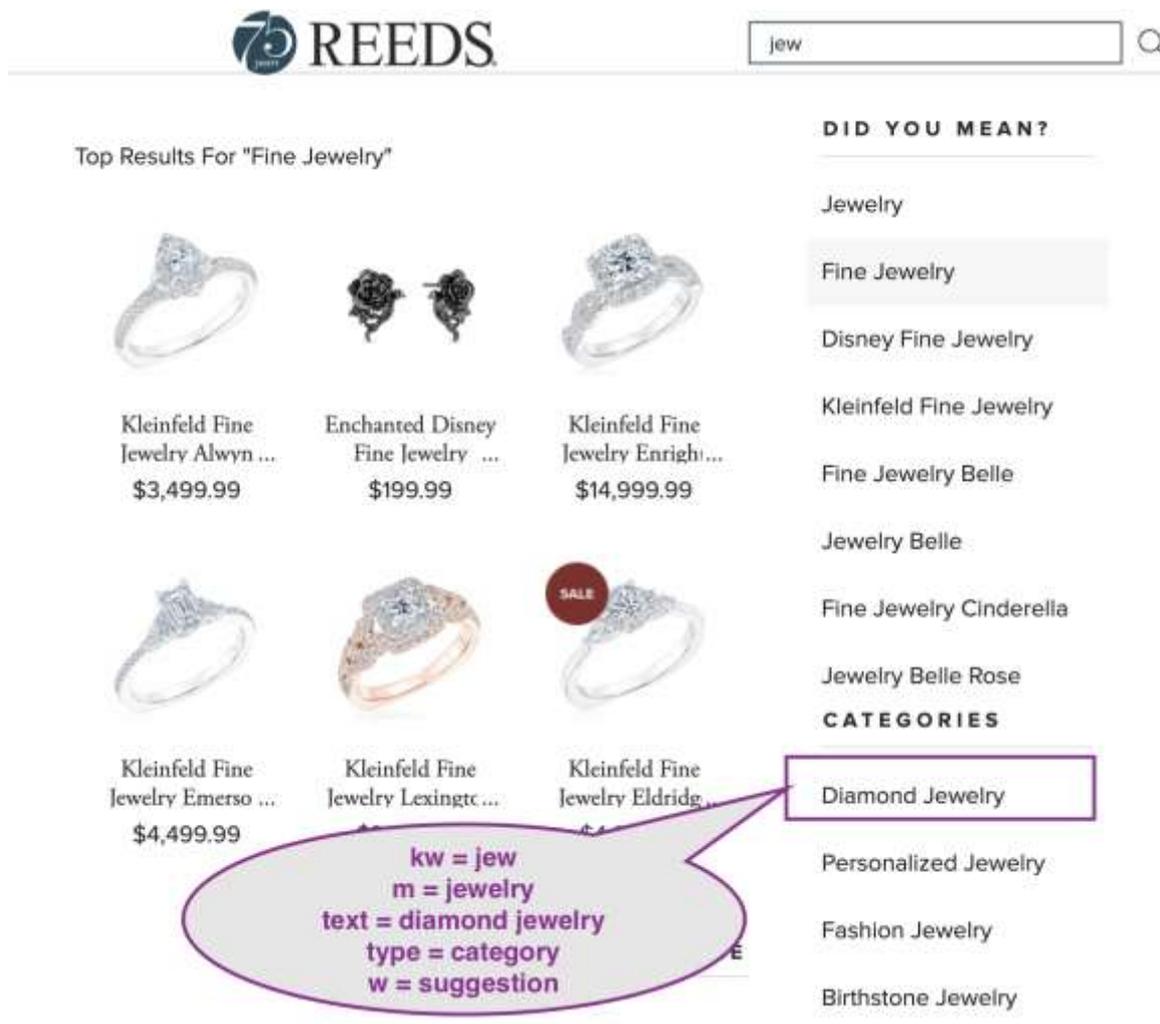
Name	Description	type	Required	Business Impact
type	Event type that is used to identify the event.	String	Yes	

	Value is a constant string "widget"			
name	Event name is used to identify the event. Value is a constant string "click"	String	Yes	
value.rfkid	Used to associate this event to a widget that is setup in CEC.	String	Yes	This should match the corresponding rfkid setup in CEC. If not provided or wrong rfkid is sent, then all the SD attribution numbers will be missing.
value.f (deprecated)	It is called rfk track feature, for search results widget it should be set to "sb" (Search Bar)	String	Yes	
value.w	A constant string "suggestion" to denote that click happened in suggestion area of preview search widget	String	Yes	
value.text	text of the category/brand suggestion link that was clicked.	String	Yes	Calculate attribution to a specific link text that the user clicks in a preview search widget.
value.type	Type of the link that was clicked in this case it would be "category"/ "brand"	String	Yes	Calculate attribution to a specific type of link that the user clicks in a preview search widget.
value.index	Position or index of the link that was clicked. Indexing starts from 0.	integer	No	Useful in computing advanced analytics.
value.kw	Original Keyword or search text that user entered in the search box.	String	Yes	Used in calculating keyword attributions to the text entered by the user.

value.m	modified keyword that was returned as part of search response.	String	Yes	Calculate attribution to modified keyword returned by Search API.
value.context.page	Adds page-specific information (including locale information) under page object, Refer to Page Object.	Object	No, but required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see event sample below.	Object	No, but required if the site has multiple locales.	

Sample Event specification (New format, context object):

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "rfkid_6",
    "w": "suggestion",
    "kw": "jew",
    "m": "jewelry",
    "text": "diamond jewelry",
    "type": "category",
    "index": "1"
  }
}
```

Sample Event specification (Old format, deprecated):

```
{
  "type": "widget",
  "name": "click",
```

```
    "value": {
      "rfkid": "rfkid_6",
      "w": "suggestion",
      "kw": "jew",
      "m": "jewelry",
      "text": "diamond jewelry",
      "type": "category",
      "index": "2",
      "locale": {
        "lg": "language code 2 letters, lowercase, e.g. en",
        "co": "country code, 2 letters, lowercase, e.g. fr",
        "cy": "currency code, 3 letters, lowercase, e.g. eur"
      }
    }
}
```

4.4.5   Widget Click Event - Product Click (widget:click)

This event must be sent when a user clicks on a product in the Product Area of a Preview Search Widget. This event is used in analytics to:

- Calculate Keyword/ Keywordless attribution to the Product section of preview search widget.

- Calculate Sitecore Discover Direct click attribution metrics

- Calculate Direct click attribution metrics in keyword analytics.

- Calculate top clicked products in Widget and Keyword Analytics.

- Calculate Direct Click attribution to Trending Category/Brand or Suggestion Category/Brand or Suggested Keyphrase section of preview search widget. (Future)

Name	Description	Type	Required	Business Impact
type	Event type that is used to identify the event. Value is a constant string `"widget"`	String	Yes	
name	Event name is used to identify the event. Value is a constant string `"click"`	String	Yes	
value.rfkid	Used to associate this event to a widget that is setup in CEC.	String	Yes	This should match the corresponding `rfkid` setup in CEC. If not provided or wrong `rfkid` is sent, then all the SD attribution numbers will be missing.

value.f (deprecated)	It is called rfk track feature, for search results widget it should be set to "sb" (Search Bar)	String	Yes	
value.index	Position or index of the product that was clicked. Indexing starts from 0.	Integer	No	Useful in computing advanced analytics.
value.kw	Original Keyword or search text that user entered in the search box.	String	No, required if user typed something in search box	Used in calculating keyword attributions to the text entered by the user.
value.m	modified keyword that was returned as part of search response.	String	No, required if backend returned modified keyword.	Calculate attribution to modified keyword returned by Search API.
value.text	text of the suggestion link that the user hovers over to see the product before he clicks on the product.	String	Yes	Calculate direct click attribution to a specific area of the preview search widget, PVS widget and keyword analytics. Note that this is different than 'm' above which is the modified keyword returned as part of the response from Sitecore Discover.
value.type	Type of the suggestion link that the user hovers over to see the product before he clicks on the product. It could be one of "trending_category" "trending_brand" "keyphrase" "category" "brand"	String	Yes	Calculate direct click attribution to a specific area of the preview search widget, PVS widget and keyword analytics.
sku	Product variation SKU	String	Yes	This event supports sending

				just the `sku` field, but you could also send products array with a single product object in it.
value.context.page	Adds page-specific information (including locale information) under page object, Refer to [Page Object]().	Object	No, but required if the site is setup with Locale configuration.	
value.locale (deprecated)	A locale object, see event sample below.	Object	No, but required if the site has multiple locales.	

Sample Event specification (New format, context object):

```json
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "f": "sb",
    "rfkid": "rfkid_6",
    "kw": "jew",
    "m": "jewelry",
    "text": "fine jewelry",
    "type": "keyphrase",
    "index": "1",
    "products": [
      {
        "sku": "191258"
      }
    ]
  }
}
```

Sample Event specification (Old format, deprecated):

```json
{
```

```
"type": "widget",
"name": "click",
"value": {
  "f": "sb",
  "rfkid": "rfkid_6",
  "kw": "jew",
  "m": "jewelry",
  "text": "fine jewelry",
  "type": "keyphrase",
  "index": "1",
  "products": [
    {
      "sku": "191258"
    }
  ],
  "locale": {
    "lg": "language code 2 letters, lowercase, e.g. en",
    "co": "country code, 2 letters, lowercase, e.g. fr",
    "cy": "currency code, 3 letters, lowercase, e.g. eur"
  }
}
}
```

4.5 Generic Widget Events

4.5.1 Widget Appear Event (widget:appear) [track:appear, old convention]

This event must be sent when the user sees a Sitecore Discover widget on a customer site. This event is for capturing an appear for all widgets, including HTML content block, Discover or other types of widgets. This is a generic widget appear/view event specification, Refer to specific widget sections like Recommendation, Full Page Search or Preview Search for event specification for those widgets. The information provided in this widget is used:

- To calculate Sitecore Discover view assisted attributions like View assisted Revenue, View assisted Orders and View assisted Conversions at Domain, Widget type and Widget level.

- To calculate CTR (click/views) number for Site or Widget type or Widget which is an important metric to track.

Name	Description	type	Required	Business Impact
type	Event type that is used to identify the event. Value is a constant string "widget"	String	Yes	
name	Event name is used to identify the event. Value is a constant string "appear"	String	Yes	
value.rfkid	It is used to associate this event to a widget that is setup in CEC.	String	Yes	This should match the corresponding `rfkid` setup in CEC. If not provided or wrong `rfkid` is sent, then all the SD attribution numbers will be missing.
value.context.page	Add page specific information (including locale information) under page object, Refer to Page Object	Object	No, but required if the site is setup with Locale	

Sample Event specification (New format, context object):

```
{
  "type": "widget",
  "name": "appear",
  "value": {
    "context": {
```

```
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "Widget rfkid goes here"
  }
}
```

Sample Event specification (Old format, deprecated):

```
{
  "type": "widget",
  "name": "appear",
  "value": {
    "rfkid": "Widget rfkid goes here",
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.5.2   Widget Click Event (widget:click)

This event must be sent when the user clicks anywhere on a Sitecore Discover widget. This event is for capturing button click on HTML content block widgets or embedded buttons like a2c or qview inside Search/Recommendation widgets. This is a generic click event specification, Refer to specific widget sections like Recommendation, Full Page Search or Preview Search for event specifications for those widgets.

Example use cases:

"Shop Now" button on HTML content block
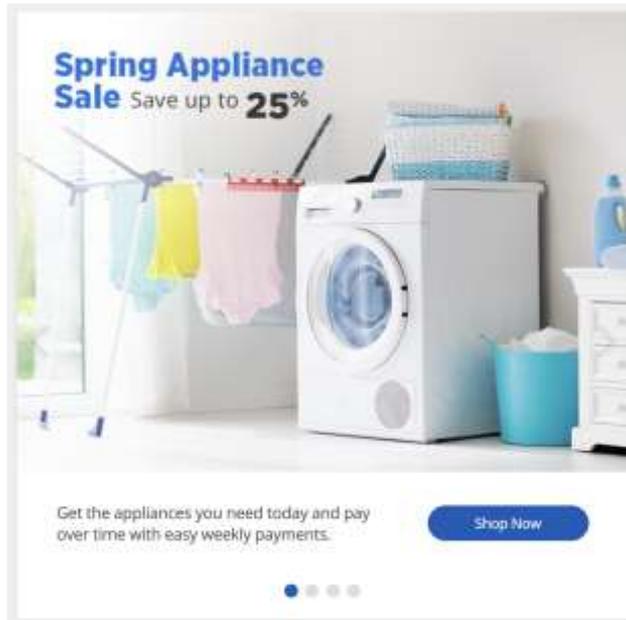
Embedded a2c button in search results
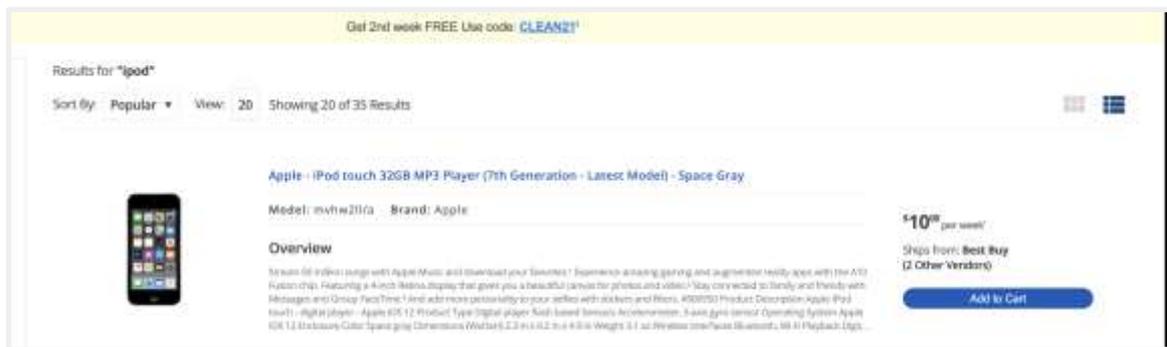
Embedded add all to cart button
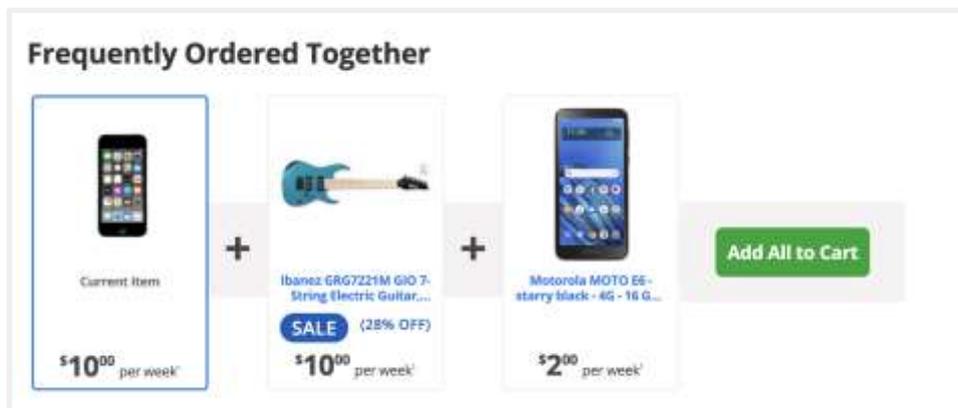
This event is used to calculate Sitecore Discover click assisted attributions like Click assisted Revenue, Click assisted Orders and Click assisted Conversions at domain, widget type, and widget level:

- It is used to calculate CTR (click/views) which is an important metric to track at Site or Widget type or Widget level.

- If a user clicks on a product, then SKU is used to calculate attribution metrics like Direct Purchase Revenue (DPR), Direct Order Revenue (DOR), Direct Orders (DO), and Direct Purchase Units (DPU) metrics. It is also used to generate Keyword Product Analytics that is displayed on the Keyword Details page.

- Must include "kw" (Original Keyword) & "m" Modified Keyword if the widget event is related to search widget (full page or preview search). This information is used to compute Keyword analytic metrics like Search Clicks, Click Revenue, Direct Purchase Revenue (DPR), Direct Order Revenue (DOR), Direct Orders (DO), and Direct Purchase Units (DPU) etc.

Name	Description	type	Required	Business Impact
type	Event type that is used to identify the event. Value is a constant string "widget".	String	Yes	
name	Event name is used to identify the event. Value is a constant string "click"	String	Yes	
value.rfkid	It is used to associate this event to a widget that is setup in CEC.	String	Yes	This should match the corresponding `rfkid` setup in CEC. If not provided or wrong `rfkid` is sent, then all the SD attribution numbers will be missing.
value.index	Position of the product/link on which user clicked in a widget. Indexing starts with 0.	number	Required only if it is a product/facet lick.	Used in computing future advanced analytics.
value.kw	Original Keyword or search text that user entered in the search box.	String	Required only if the widget type is search.	Calculate attribution to Keyword entered by the user.

value.m	modified keyword that was returned as part of search response.	String	No, required if backend returned modified keyword.	Calculate attribution to modified Keyword returned by Search API.
value.click_type	It is the type of the link/button that is associated with this click event. Refer to click_type for details.	String	Required if this is a click on html content or action button embedded in widgets.	This helps to understand the interaction of the user with SD widgets. It will be used in future analytics to show the number of times users clicked on a specific link/button type, like a heat map.
value.click_sub_type	Additional sub type of the link/button that the user clicked.	String		Useful for facets where there can be additional nesting.
value.click_text	Label value of the link/button associated with the above click type. Example values are "Add to Cart" / "Show" / "Quick View"	String	Required if this is a click on html content or action button embedded in widgets.	
value.click_text_id	A normalized text ID of a label value associated with the link/button that the user clicked in a widget. This will help to standardize Label Text Values so backend systems don't need to change if label text has cosmetic changes.		No	
value.click_uri	URI/link associated with the click.	String	Required if the link/button that is	

			clicked has uri/href associated with it.	
value.products	Products array having a single product object that the user clicked in a widget.	Array	Required if click was a product click.	
value.products[].sku	SKU of the product the user clicked in a widget.	String	Required only if click was a product click,	SKU is used in calculating direct attributions.
value.context.page	Add page specific information (including locale information) under page object, Refer to Page Object	Object	No, but required if the site is setup with Locale	
value.locale (deprecated)	A locale object, see above event sample.	Object	No, but required if the site has multiple locales.	

Supported click_types

Click Type	Description
"product"	Click on a product in a Sitecore Discover widget.
"view"	Click on View or Quick view button embedded in a Sitecore Discover Widget
"pagination"	must be set when clicked on a carousel or previous or next button

"a2c"	Click on add to cart button embedded in a Sitecore Discover widget.
"all_a2c"	Click on add all to cart button embedded in a Sitecore Discover Widget.
"category"	Click on a link/button in a content widget that takes the user to a category page.
"article"	Click on a link/button in a content widget that takes the user to an article page.
"search"	Click on a link/button in a content widget that takes the user to the search page.
"signup"	Click on a link/button in a content widget that takes the user to some type of registration.
"choice"	Click on a Discover Choice like "Shop your Style" or "Shop your color".
"other"	Click on a link/button in a content widget that takes the user to any other types of page/content.
"discover"	Click on a link/button that opens SD Discovery your style widget.

Sample Event specification (New format, context object):

```
{
  "type": "widget",
  "name": "click",
  "value": {
    "context": {
      "page": {
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      }
    },
    "rfkid": "Widget rfkid goes here",
    "f": "sp/sb/rw/cb",
    "kw": "original keyword/search term",
    "m": "modified/corrected keyword/search term",
    "click_type": "type like a2c or qview",
    "click_text": "label of the button like add to cart",
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ]
```

```
    }
  }
}
```

Sample Event specification (Old format, deprecated):

```json
{
  "type": "widget",
  "name": "click",
  "value": {
    "rfkid": "Widget rfkid goes here",

    "kw": "original keyword/search term",
    "m": "modified/corrected keyword/search term",

    "click_type": "type like a2c or qview",
    "click_text": "label of the button like add to cart",
    "index": 0,
    "products": [
      {
        "sku": "191258"
      }
    ],
    "locale": {
      "lg": "language code 2 letters, lowercase, e.g. en",
      "co": "country code, 2 letters, lowercase, e.g. fr",
      "cy": "currency code, 3 letters, lowercase, e.g. eur"
    }
  }
}
```

4.5.3   Example Widget Events

Content widget events (HTML content block, banner widget)

Action Type	Event Example	Comments
View a content widget	```{ "type": "widget", "name": "appear", "value": { "context": { "page": { "locale_country": "country code, 2 letters, lowercase, e.g. fr", "locale_language": "language code 2 letters, lowercase, e.g. en", "locale_currency": "currency code, 3 letters, lowercase, e.g. eur" } }, "rfkid": "Widget rfkid goes here" } }```	This Event must only be sent when a content widget is in the user's view port or seen by the user.
Click on a button/link embedded in a content widget	```{ "type": "widget", "name": "click", "value": { "context": "Refer to Default Context",```	Refer to Supported click types

```
            "rfkid": "rfkid of HTML Content
widget",

            "click_type":
"article/category/other",
            "click_text": "Shop Now",
            "click_text_id": "show_now",
            "click_uri": "catalog/shop_how",
            "index": 0
        }
    }
```

4.5.4   Discover your style widget events

Action Type	Event Example	Comments
Click on "SD Discover your style" button	```{ "type": "widget", "name": "click", "value": { "context": "Refer to Default Context", "rfkid": "rfkid of Discover widget", "click_type": "discover", "click_text": "SD Discover your style", "click_text_id": "rfk_discover_your_style" } }```	This event must be sent when the embedded button is clicked to launch SD discover your style widget.
View a widget	```{ "type": "widget", "name": "appear", "value": { "context": { "page": { "locale_country": "country code, 2 letters, lowercase, e.g. fr", "locale_language": "language code 2 letters, lowercase, e.g. en", "locale_currency": "currency code, 3 letters, lowercase, e.g. eur" } }, "rfkid": "rfkid of Discover Widget" } }```	This event must be sent when the widget is seen by the user.
Click Discover Choice like "Off Shoulder" "Similar Colored"	```{ "type": "widget", "name": "click", "value": { "context": "Refer to Default Context", "rfkid": "rfkid of Discover Widget", "click_type": "choice", "click_sub_type": "attribute_id/choice id", "click_text_id": "off_shoulder", "click_text": "Off Shoulder",```	`click_type` gives top level grouping of the widget component that the user interacts with. `click_sub_type` must include the choice type or choice Id that user clicked.

	```json "index": 0 } }```	
Click to change context product	```json { "type": "widget", "name": "click", "value": { "context": "Refer to Default Context", "rfkid": "rfkid of Discover Widget", "click_type": "product", "click_sub_type": "product_switch", "index": 0, "products": [{ "sku": "191258" }] } }```	click_sub_type must be "product_switch" to differentiate between product click vs context switch vs swatch click.
Click on a product to go to a PDP page	```json { "type": "widget", "name": "click", "value": { "context": "Refer to Default Context", "rfkid": "rfkid of Discover Widget", "click_type": "product", "index": 0, "products": [{ "sku": "191258" }] } }```	click_sub_type must be "product" to differentiate between product click vs context switch vs swatch click.
Click on a swatch icon to switch to a different variant of a product	```json { "type": "widget", "name": "click", "value": { "context": "Refer to Default Context", "rfkid": "rfkid of Discover Widget", "click_type": "product", "click_sub_type": "swatch", "index": 0, "products": [{ "sku": "191258" }] } }```	click_sub_type must be "swatch" to differentiate between product click vs context switch vs swatch click.
Click on navigation	```json { "type": "widget", "name": "click", "value": { "context": "Refer to Default Context", "rfkid": "rfkid of Discover Widget", "click_type": "pagination",```	

| | ```
          "click_text": "Next/Previous"
          "click_text_id": "next/previous"
        }
      }
``` | *85* |
| Click on Close | ```
    {
      "type": "widget",
      "name": "click",
      "value": {
        "context": "Refer to Default
Context",
        "rfkid": "rfkid of Discover
Widget",
        "click_type": "close",
        "click text": "X/Close",
      }
    }
``` | This along with `pdp:view` events act as a marker to identify the interactivity of a user with Discover your style widget. |

Chapter 5 Reference: Event Object

Type: Object

Required keys:

Name	Data type	Description	Required
type	String	Type of the event	Yes
name	String	Name of the event	Yes
value	Object	Event value object	Yes

Other keys required only when using Sitecore Discover API:

Name	Data type	Description	
t	Integer	Time of the event in millisecond	Yes
t0	Integer	Time of the page loaded in millisecond	
uuid	String	SD unique user ID automatically generated by SD when using SD JavaScript function.	One of the `uuid` or `user_id` must be provided.
user_id	String	Customer supplied anonymous user ID. i.e., it shouldn't contain any PII information. *Required only if using Sitecore Discover APIs and `uuid` is not provided.* *Note: If you include Sitecore Discover Beacon in your website, Sitecore Discover will generate UUID.*	One of the `uuid` or `user_id` must be provided.

		Otherwise, you must generate your own anonymous ID and pass as `user_id` *when calling via Sitecore Discover API.*	*87*

t, **t0** and **uuid** keys are automatically added when calling via Sitecore Discover JavaScript function.

Optional keys:

Name	Type	Description
device	String	device type, possible values: pc, mobile or tablet
app_type	String	application type, possible values: native, ~~webview~~, browser

5.1 Event Type and Event Name

Event types and event names should be from the following list, however Sitecore Discover supports any other event name with the type specified as "custom".

type	name	Description
view	home	Home page visited by user
	pdp	Product page visited (Example)
	confirm	Order confirmation page visited
	cart	Cart page visited
	category	Category page visited
	search	Search page visited
	other	Any other apart from above list
a2c	pdp | qview | cart	User added product variation to cart from product page or quick view or cart page (Example)
a2w	pdp | qview | cart	User added product/variation to wishlist from product page, quick view, or cart page
like	cart | pdp | qview	User liked product/variation from cart page, product page or quick view
status	cart	Report status of the cart, usually when user visits the cart page (Example)
order	checkout (deprecated)	Report order event in checkout page before finalizing order
	confirm	Report order event after order completed in confirmation page (Example)
user	login	Report login event after user has logged in.
	info	Report any user information related event, e.g.: email subscription

widget	click	Click on any widget ([Example](#))	89
	appear	Any widget appeared	

Widget events are automatically sent when Sitecore Discover Beacon (`init.js`) is included on the site.

5.2 Event Value Object

Type: Object

5.2.1 Required keys

Name	Type	Description	Required
context	Context Object	Context information	Yes, required when 1. User's geo or browser information while sending events via API, OR 2. Sending user's fitment information
products	Array of Product Object(s)	Array of Object(s) for product(s) information	Yes, for product events like widget:click view:pdp order:confirm a2c status:cart
user	User Object	Basic User information	Any time user information is accessed user:login or user:info or order:confirm event.
checkout	Checkout Object	Object including checkout information	Required for order:confirm event.

5.2.2 Keys specific to widget appear and widget click events

Name	Type	Description
f	String	Feature code to identify the type of widget. Required only for widget appear and widget click events. rw: recommendation widget sp: search results widget sb: preview search widget cb: one of the content block widgets like banner or html block.

rfkid	String	`rfkid` of the widget configured in CEC
index	Integer	Position in the list of objects, "index" value starts from 0. An object could be a list of products, keyphrase suggestions, suggested categories, etc.

5.2.3 Optional keys

Name	Type	Description
url	String	URL of the page in which widget is placed. This is required for widget events.
dn (deprecated)	String	domain
locale (deprecated)	Locale Object	Locale information

*Both keys are required if customer needs Locale support

5.2.4 Keys specific to preview search widget for suggestions

Name	Type	Description
w	String	Area where the click happened. Possible values are: **- suggestion**: user clicked in one of the suggestion areas of the preview search widget. Please see 'type' field for further qualifying the type of suggestion.
type	String	Link type. Possible values are: - trending_category - trending_brand - keyphrase - category
text	String	the text of the link that was clicked
kw	String	keyword that user typed before clicking on the link
m	String	modified keyword that was returned part of search response
index	Integer	position/index of the link that was clicked.

		Indexing starts from 0.

5.2.5 Keys specific to search results widget for clicks on facets

Name	Type	Description
w	String	Area where the click happened. Possible values are: **- facet**: user clicked in one of the search facets. Please see 'type' field for further qualifying the type of facet.
type	String	Facet type. The value is the type of the facet the user clicked on. Ex: color, ring_type, size, rating, price
text	String	Facet value that the user clicked on. Ex: red, bridal, medium, 4.5, 23.99
kw	String	keyword that user typed before clicking on the link
m	String	modified keyword that was returned part of search response
index	Integer	position/index of the facet value the user clicked within the given facet type the user clicked on. Indexing starts from 0.

5.3 Context Object

In events, the Context Object is used to describe additional information about the user visiting the site, page being visited, location from which they are browsing, device on which they are browsing etc.

Context Objects are an integral part of all API requests for Search, Recommendation or Content widgets. (See Sitecore Discover API - Search & Recommendations documentation). The Event Object allows the same Context Object to be sent so there is standardization and reuse of the information available under the Context Object.

Additionally, the Context Object is used when events posted via REST API call need additional information like device or geo to be populated. This is because Sitecore Discover is not present on the customer site that usually populates this information. So, Context Object specification standardizes these attributes to be included in an event.

Supported context objects are:

- browser

- geo

- fitment

- user

- campaign

- page

- store

Sample Context in Event

```
{
  "type": "...",
  "name": "...",
  "value": {
    "products": [
      {
        "sku": "191258"
      }
    ],
    "index": "1",
    "text": "diamond rings",
    "type": "category",
    "context": {
      "fitment": {
        "ids": [
          "fit-id1",
          "fit-id2"
```

```
        ]
      },
      "geo": {
        "ip": "10.x.x.x",
        "country": "US",
        "state": "California",
        "city": "San Mateo",
        "zip": "94404"
      },
      "page": {
        "locale_language": "language code 2 letters, lowercase, e.g. en",
        "locale_country": "country code, 2 letters, lowercase, e.g. fr",
        "locale_currency": "currency code, 3 letters, lowercase, e.g. eur"
      },
      "user": {
        "id": "user-1234",
        "email": "abc.def@email.com",
        "eid": "hash_of_email",
        "fbid": "facebook_id",
        "address": {
          "address_line_1": "123 Main Street",
          "address_line_2": "apartment 123",
          "state": "CA",
          "zip": "90210",
          "country": "US"
        }
      },
      "store": {
        "id": "s123",
        "group_id": "g1"
      }
    }
  }
}
```

Required keys

Name	Type	Description	Required
browser	Browser Object	Browser or device information of the user.	Yes, required when sending events via API or native application
geo	Geo Object	Location information of the user	Yes, required when sending events via API or native application.
fitment	Fitment Object	Fitment information of the user in context of product. Applicable only for customers with fitment feature.	No, but it is required when the user has selected a fitment.

Context – Browser

The following are the keys supported in the browser context object.

Field	Type	Description
user_agent	*String*	The browser user agent. Must follow industry convention to ensure `device` and `app_type` can be detected automatically.
device	String	Either • pc • tablet • mobile By default, this is computed automatically from `user_agent`
app_type	String	Either • browser • webview

		• native By default, this is computed automatically from `user_agent`. `browser`: `user_agent` starts with "Mozilla" and doesn't contain one of the webview keywords (see below) `webview`: `user_agent` starts with "`Mozilla`" and contains "`WebViewApp`" or "`wv`" keywords in the string. `native`: `user_agent` doesn't start with "`Mozilla`".

Context – Geo

The following are the keys supported in the geographic context object. This is the geographic location of the end user.

Note:
Sitecore Discover's AI system considers geo information provided in the request and events. If the request contains inconsistent information, Sitecore Discover's system will not be able to utilize geo-specific intelligence.

Field	Type	Description
ip	String	IP address (optional) The IP address is the IP address of the user that is sent by the browser or native application. Do **NOT** pass the IP address of your server or your proxy. If IP is not specified, it will be read from [X-Forwarded-For](#) header of the request. If there is no X-Forwarded-For header, the IP of the request will be used as default. SD uses Geo IP lookup service to extract country, state, city, zip code. If explicitly provided, then it will

		take precedence over extracted information.
country	String	2 Letter Country Code ([ISO Alpha-2](#)) By default, this is computed automatically from `ip`.
state	String	State or province name (also referred as region) Please note this should be full name, **not** a state code. Example: "`North Dakota`", not "`ND`" By default, this is computed automatically from `ip`.
city	String	City name Please note this should be full name, **not** a code. By default, this is computed automatically from `ip`.
zip	String	Zip/Postal code of the location By default, this is computed automatically from `ip`.

Context - Fitment

Refer to [Fitment Object](#) specification.

Context – User

The following are the keys supported in the user context object.

Name	Type	Description
id	*String*	It is the permanent internal id in the customer system that uniquely identifies a user. This could be a primary key in a user database or an id in a CDP system or any other systems that is used to manage user information. Note: This id is different than the `uuid` or `user_id` which are anonymous tracking ids assigned to any

		visitor visiting your website.
email	*String*	Email of the user
fbid	String	Customer Facebook id
eid	String	Opaque id representing user's email id as identified by your Email Service Provider
address	Address Object	User postal address information. This is usually also the billing address. Note that shipping address is provided as part of `shipping_address` in the checkout object.
groups	Array of Strings	Custom groups or segments assigned to the user. This is a free-form string.
gender	String	User's gender. Valid values are: `"male"`, `"female"`, `"other"`
addn_attributes	Object	A map of customer specific user attributes

Context - Page

The following are the keys supported in the page context object.

Field	Type	Description
referrer	String	The page referrer
uri	String	The URL of the current page. Note that `uri` should correspond to a page set or single page defined in the Merchandising Control Center.
title	String	The title of the current page
sku	[]String	List of products that are on this page/in the cart. For a product page (PDP page) it would be the single SKU that represents it.
locale_country	String	The country specified as part of the locale context as per ISO 3166 Alpha 2 country code (e.g., `us`, `ca`,

		…).
locale_language	String	The language specified as part of the locale context as per ISO 639-1 standard language codes (e.g., `en`, `fr`, …).
locale_currency	String	currency code used by the locale specific site.

Context – Store

A Store may be specified as part of the context. See [Store Object](#) for details.

5.4 Store Object

The following are the keys supported in the Store Object.

Field	Type	Description
id	String	An identifier for a store.
group_id	String	Additional identifier when the stores are organized in a hierarchy

Note:

1. Store `id/group_id` may be specified in the [Context](), in the [Checkout]() object or in the [Products]() object.

2. Store specified in context level is used to calculate intent/assisted metrics saying the user had an intent to do BOPIS transactions.

3. Store specified in product/context is used to calculate actual BOPIS metrics.

4. Store specified at product level overrides store specified at checkout level.

Sample order event with store provided in context

```
{
  "type": "order",
  "name": "confirm",
  "value": {
    "context": {
      "user": {}, // add user information
      "page": {}, // add locale or other page information
      "store": {
          "id": "store id selected while browsing",

          "group_id": "store group id selected while browsing"

      }
    },
    "products": [
      {
        "sku": "191258",
        "quantity": 1,
        "price": 11.99,
        "price_original": 19.99,
        "fitment": {
          "ids": [
            "2222"
          ]
        }
      },
      {
        "sku": "23432",
        "quantity": 1,
        "price": 12.99,
        "price_original": 14.99
      }
    ],
```

```
    "checkout": {
      "order_id": "1234",
      "subtotal": 39.97,
      "total": 50.96
    }
  }
}
```

Sample order event with store provided in context as well as checkout

```
{
  "type": "order",
  "name": "confirm",
  "value": {
    "context": {
      "user": {},
      "page": {},
      "store": {
        "id": "store id selected while browsing",
        "group_id": "store group id selected while browsing"
      }
    },
    "products": [
      {
        "sku": "191258",
        "quantity": 1,
        "price": 11.99,
        "price_original": 19.99,
        "fitment": {
          "ids": [
            "2222"
          ]
        }
      },
      {
        "sku": "23432",
        "quantity": 1,
        "price": 12.99,
        "price_original": 14.99
      }
    ],
    "checkout": {
      "order_id": "1234",
      "subtotal": 39.97,
      "total": 50.96,
      "store": {
        "id": "store id selected during checkout, it could be different than one in
context",
        "group_id": "store group id selected during checkout, it could be different
than one in context"
      },
      "shipping_method": "bopis"
    }
  }
}
```

Sample order event with store provided in context as well as product

The following example shows multiple shipping methods in a single order. `sku` "191258" uses default shipping, whereas `sku` "23432" has a BOPIS shipping method.

```
{
  "type": "order",
  "name": "confirm",
  "value": {
    "context": {
      "user": {},
      "page": {},
      "store": {
        "id": "store id selected while browsing",
        "group_id": "store group id selected while browsing"
      }
    },
    "products": [
      {
        "sku": "191258",
        "quantity": 1,
        "price": 11.99,
        "price_original": 19.99,
        "fitment": {
          "ids": [
            "2222"
          ]
        }
      },
      {
        "sku": "23432",
        "quantity": 1,
        "price": 12.99,
        "price_original": 14.99,
        "store": {
          "id": "store id selected during checkout, it could be different than one
in context",
          "group_id": "store group id selected during checkout, it could be
different than one in context"
        },
        "shipping_method": "bopis"
      }
    ],
    "checkout": {
      "order_id": "1234",
      "subtotal": 39.97,
      "total": 50.96
    }
  }
}
```

5.5 Product Object

Product object represents information about one product or product variation (SKU). Refer to individual events for details about how price, quantity is used based on the event type.

Required keys for product variation (SKU):

Name	Type	Description	Required
*sku	String	Product variation SKU.	Yes
quantity	integer | float	Quantity of product selected by user	Yes
*psku (deprecated)	String	Parent product SKU	Required only if it is a parent product
product_group	String	Product group or style id that is used to represent a group of SKUs	Required only if it is a parent product
price	Float	Price of product (if all variations have same price)	Yes
price_original	Float	Used when paid price is not the same as original price	No
attributes	Product attributes such as color, size	Object	No
fitment	[Fitment Object](#)	User fitment object that either has an array of ids (customers having fitment feed) or array of fitment items (customers that don't have fitment feed)	No. Required only if the customer is a fitment customer.
store	[Store Object](#)	Store object that represents the store that this product is being bought from or being picked up from etc. (See [Shipping Methods](#)). Store specified at the product level overrides store that might be specified in Checkout Object or Context Object.	No.
shipping_meth	String	used to identify the type of order. For	No. It is needed

od		valid values, refer to [Shipping Methods](#)	when the order is a BOPIS order or something specific other than the regular order.

*psku or sku: The required keys for reporting parent products or variation products are different. Product variation needs to be reported in the events when an exact item needs to get detected like add to cart or order, but parent products may be reported in events like product detail page view or add to favorite. For example:

```
"products": [
  {
      "sku": "XYZ-123",
      "price": 14.99,
      "quantity": 2,
      "price_original": 29.99,
      "attributes": {
            "size": "xl",
            "product_type": "milkChocolate"
      }
  }
]
```

5.6 Fitment Object

Object that represents a fitment or compatibility of the given product, that the user has chosen when interacting with Sitecore Discover services. The following table defines the fields in a fitment object.

Field	Type	Description

ids	Array of strings	Used by customers having fitment as an entity and have fitment ids in their system. These customers must send fitment feed to Sitecore Discover so we can identify the customer's fitment ids.
		
		Ex:
		
		`"fitment": {`
		`  "ids": ["fitid1", "fitid2"]`
		`    }`

items	Array of fitment objects	Customers that don't have a separate fitment entity should send fitment attributes part of the context.
		
		Ex:
		
		`"fitment": {`
		`  "items": [`
		`        {`
		`          "year": "1990",`
		`          "make": "Honda",`
		`          "model": "H1"`
		`        },`
		`        {`
		`          "year": "2015",`
		`          "make": "Ford",`
		`          "model": "F100"`
		`        }`
		`      ]`
		`   }`

Fitments may be specified in one or two different scopes. It may be specified as part of the Context Object, and it may be specified as part of the Product Object. Fitment may be specified as part of the Product Object to associate specific fitment that may be different for each product. Examples of these events are Product viewed, Product added to cart, Order Confirm and Widget click.

For example, let's say a user buys a tire that fits 1980 Toyota Camry (fitment ID: 1111), and he buys another tire that fits 2010 Lexus ES300 (fitment ID 2222). Then you may specify the fitment for each product in Add to Cart and Order Confirm event with individual fitments.

Example 1: Fitment object at context level, there are two SKUs, but context has only one fitment which is the user's current fitment.

```
{
  "type": "order",
  "name": "confirm",
```

```
  "value": {
    "context": {
      "fitment": {
        "ids": [
          "1111"
        ]
      }
    },
    "products": [
      {
        "sku": "XYZ-111"
      },
      {
        "sku": "XYZ-222"
      }
    ]
  }
}
```

Example 2: Fitment at product level. This is more accurate as each product clearly specifies its associated fitment.

```
{
  "type": "order",
  "name": "confirm",
  "value": {
    "context": {
    },
    "products": [
      {
        "sku": "XYZ-111",
        "price": 514.99,
        "quantity": 1,
        "fitment" : {
            "ids": ["1111"]
        }
      },
      {
        "sku": "XYZ-222",
        "price": 549.99,
```

```
            "quantity": 1,
            "fitment" : {
                "ids": ["2222"]
            }
        }
      ]
    }
}
```

Note:

1. Not ensuring the user's fitment is matching the product for which the event is being sent to Sitecore Discover will result in less accurate fitment-based analytics reports.

2. If fitment information is sent at both context and product level, then product level is honored, and context level is ignored.

5.7 Fitment Object (Deprecated)

The Fitment Object is an object that represents a fitment or the compatibility of the given product, that the user has chosen when interacting with Sitecore Discover services.

It is important to send a fitment object **only** when the product matches the user's chosen fitment in analytic events i.e., Product viewed, Product added to cart, Order Confirm and Widget click.

Use cases are as follows:

1. If the search or recommendations requests were made along with fitment filter, then corresponding events must have the user's fitment object (Widget Click event).

2. When a user is on a product details page, fitment object should be included only when the product matches user's fitment.

3. When a user adds a product/SKU to cart, send the user's fitment that was associated with that product when adding to cart.

4. When a user places an order, send the user's fitment that was associated with that product when it was added to cart.

Not ensuring that a user's fitment is matching the product for which the event is being sent to Sitecore Discover will result in less accurate fitment-based analytics reports.

Required keys:

Key	Type	Description
year	String	Required. Year of the specific vehicle, appliance, etc. that the product is compatible with
make	String	Required. Make of the specific vehicle, appliance, etc. that this product is compatible with.
model	String	Required. Model of the specific vehicle, appliance, etc. that this product is compatible with.

Optional keys:

Key	Type	Description
fit_type (Deprecated)	Enum	Optional. Quality of fit that was requested. This can be: **exact_fit:** product matches the user fitment. This is the default. **partial_fit:** product partially matches the user fitment. **no_fit**: product does not match the user fitment.

		Deprecation Note: Most fitment customers like automobile or computer peripherals require a complete fitment object to match a given product to fitment. A customer doing fitment restriction/validation will use a complete fitment object hence partial fit type is not applicable.
sub-model	String	Sub-model of the specific vehicle, appliance, etc. that this product is compatible with.
engine	String	engine of the specific vehicle, appliance, etc. that this product is compatible with.
transmission	String	transmission of the specific vehicle, appliance, etc. that this product is compatible with.
trim	String	trim/body style of the specific vehicle, appliance, etc. that this product is compatible with.
truck_bed_length	String	truck_bed_length of the specific vehicle, appliance, etc. that this product is compatible with.

The following shows an example of fitments in Product:

```
"products": [{
      "sku": "XYZ-123",
      "price": 14.99,
      "quantity": 2,
      "price_original": 29.99,
      "fitments" : [{
          "fitment_id": "1232424",
          "year": "2020",
          "make": "BMW",
          "model": "S1250R",
          "fit_type": "no_fit"
      }]
}]
```

5.8 User Object (deprecated) refer to context user

Object which represents user information if logged in when adding to cart.

Required keys:

Key	Type	Required	Description
id	String		Any customer supplied persistent ID to identify user (this could be different than the `user_id` which could be a unique cookie)

Optional keys:

Key	Type	Description
email	String	Users email address
fbid	String	Customer Facebook id
eid	String	Opaque id representing user's email id as identified by your Email Service Provider
address	Address Object	User postal address information. This is usually also the billing address. **Note:** Shipping address is provided as part of shipping_address in checkout object.
groups	Array of Strings	Custom groups or segments assigned to user. This is a free-form string.
gender	String	User's gender. Valid values are: `"male"`, `"female"`, `"other"`
addn_attributes	Object	A map of customer specific user attributes

Example:

```
"user": {
        "id": "user-1234",
        "email": "Abc.Def@email.com",
        "eid": "esp_email_identifier",
        "address": {
                "address_line_1":"123 Main Street",
                "address_line_2":"apartment 123",
```

```
            "state":"CA",
            "zip":"90210",
            "country":"US"
        },
        "groups": ["group1", "group2"],
        "gender": "female",
        "addn_attributes": {
            "<attr_key1>": "<attr_value1>",
            "<attr_key2>": "<attr_value2>",
            ...
        }
}
```

5.9 Address Object

The Address Object is an object that represents address information. If the Address Object is specified, then it must include at least one of the following key/value pairs.

Optional keys:

Key	Type	Description
address_line_1	String	User address line 1
address_line_2	String	User address line 2
state	String	2 letter code if in the US
zip	String	5-digit zip code if in the US
country	String	2 letter country code, defaults to "US", As per ISO Alpha 2

- All personally identifiable information like email will be encrypted.

- Address information will be geocoded up to a precision of 3 miles radius so users' physical address can't be pinpointed.

5.10 Checkout Object

The Checkout Object is an object that represents checkout information

Required keys:

Key	Type	Description
total	Float	Final price paid including tax and other fees
order_id	String	Website order ID to track the order

Optional keys:

Key	Type	Description
subtotal	Float	subtotal of products purchase price excluding tax and shipping cost
tax	Float	Tax for the order
shipping_cost	Float	Shipping fees, defaults to 0
shipping_address	Address Object	User address information
store	Store Object	Store object that represents the store that this product is being bought from or being picked up from etc. (See Shipping Methods). Store specified at the Checkout level overrides store that might be specified in Context Object.
shipping_method	String	used to identify the type of order. For valid values, refer to Shipping Methods

5.11 Shipping Methods

Shipping method indicates the type of order.

The following values are valid:

Method	Description
bopis	Buy online pick up in store
bopcs	Buy online pick up curbside
ropis	Reserve online pick up in store
same_day_shipping	Regular web transaction shipped to home in the same day
one_to_two_day_shipping	Regular web transaction shipped to home in one or two days
standard_shipping	Regular web transaction shipped to a provided address with timeline unspecified

5.12 Locale support (deprecated) Refer to context page

If you have presence in multiple countries and/or your site supports multiple locales, then the Locale Object must be sent in events data:

Key	Type	Description
locale	Object	Object containing language, country, currency

Example widget click event with locale:

```
window.rfk = window.rfk || [];


rfk.push(["trackEvent", {
     "type": "a2c",
     "name": "pdp",
     "value":{
          "products":[{
               "sku": "191258",
          }],
          "locale":{
               "lg": "fr",
               "co": "ca",
               "cy": "cad",
          }],

     }
}]);
```

Locale object:

Key	Type	Description
lg	String	ISO 639-1 language code (e.g. en, fr, ...)
co	String	ISO 3166 Alpha 2 country code (e.g., us, ca, ...)

Optional key:

Key	Type	Description
cy	String	ISO 4217 alpha currency code (e.g. usd, cad...)

Chapter 6 Appendix

6.1 Constants and Enumeration values

"f" rfk track feature

"`f`" refers to the widget type on which event originated. It is an enum composed of:

- `rw`: stands for recommendation widget

- `sp`: stands for search page (this is for the search results widget events as part of a full-page search experience)

- `sb`: stands for search bar (this is for preview search events)

- `cb`: stands for content blocks (this is for HTML blocks and banner events)

6.2 Acronyms

Acronym	Description
CTR	Click through rate
CVR	Conversion rate
DPR	Direct Purchase Revenue
DOR	Direct Order Revenue
DPU	Direct Purchase units
DO	Direct Orders

6.3 Direct attribution example

Example of how direct click attribution is calculated: [Sitecore Discover Attribution Example](#)