tracktor-docs Documentation

Release 0.9b

Intelligent Software

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Contents

For full documentation visit docs.tracktor.io.

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Quick Start Guide

1.1 Installation Guide

1.1.1 1. Embed the JavaScript snippet

Drop this code into the `head` of your site, this will asynchronously load our JavaScript library onto your page so you can use it to send us data. **Be sure to substitute in your own token:**

```
<script type="text/javascript">
  (function() {
    window.tio = window.tio || [];
    var d = document, f = d.getElementsByTagName('script')[0],
    t = 'YOUR_TOKEN_HERE',
    s = d.createElement('script'), m = ['track', 'identify','setProperties'],
    r = function (e) {return function () { tio.push([e].concat(Array.prototype.slice.call(arguments,
    s.type = 'text/javascript'; s.async = true; s.src = 'https://tracktor-dev.s3.amazonaws.com/script
    f.parentNode.insertBefore(s, f); for(var i in m) tio[m[i]] = r(m[i]);YS=tio; })();
</script>
```

1.1.2 2. Identify a Person & Send Data

If you have data about a person you want to send, such as their name, age, email address, etc, you can use the `tio.identify` and `tio.setProperties` methods:

```
tio.identify('unicorn'); // <-- login of your user, or any other unique string that identifies user a
tio.setProperties({
  email: 'unicorn@example.com',
  first_name: 'Dave',
  last_name: 'Johnson',
  age: 25,
  billing_plan: 'free'}); // + any other info about your user.
```

1.1.3 3. Track an Event

Events are actions your users do in your app. Once you have the snippet in your page, you can track an event by calling `tio.track` with the event name, and also properties as key value pairs:

```
tio.track('rated-product', {
  productid: 33156,
  category: 'Consumer electronics',
  rating: 5,
  comment: 'Very good product!'});
```

HTTP API Reference

For maximum compatibility, all our HTTP api methods use HTTP `GET`. Please, ensure that arguments are url-encoded, when sending data.

All api methods have 2 common parameters:

- `sid` - your application token
- `ts` - current Unix-style timestamp

2.1 Setting person properties

You may attach any information to person profile, such as postal address, age, subscription status, etc. These properties can be used inside letters, segments and workflows for sending personalized messages, searching, grouping people, making decisions in workflow and many other helpful stuff.

Person property can have any data type you want. It can even be a JSON array or object. However, there are some predefined properties that have a fixed data type. You can read about them *here*.

Method URL:

```
https://api.tracktor.io/set
```

Parameters:

Name	Description
sid	Your application token
ts	Current Unix-style timestamp
id	Unique identity of person
sign	*(optional)* Identity signature (See secure mode)
data	JSON object, containing new property values

Note: if a person already has some property and it's not specified in `data` object, it won't be changed. If you want to remove a particular property, you should assign `null` value to it: `{delete_me:  null}`

Example call:

```
http://api.tracktor.io/track?sid=00000000000&ts=1429186474&id=unicorn&data=%7Bbilling_plan%3A%27Gold%
```

2.1.1 Predefined properties

There are some predefined properties, which provide additional features:

Name	Description
`email`	stores person's email. You cannot send email messages to a person if this property is not set.
`first_name` `last_name`	stores person's first and last name. These properties can be updated automatically with social profile data, and they are displayed in Tracktor's UI
`profile_image`	can specify a URL for profile image, which will be displayed in the conversation widget and inside Tracktor's UI.

2.2 Tracking an event

Any person action can be tracked. Sometimes it's enough to record just the fact that something has happened, but it might also be helpful to include some additional data. It can be used in workflows and letters, just like person properties.

Method URL:

```
https://api.tracktor.io/track
```

Parameters:

Name	Description
`sid`	Your application token
`ts`	Current Unix-style timestamp
`id`	Unique identity of person
`sign`	*(optional)* Identity signature (See secure mode)
`action`	Name of tracked event
`data`	*(optional)* JSON object, containing all associated data of tracked event

Example call:

```
http://api.tracktor.io/track?sid=00000000000&ts=1429186474&id=unicorn&action=rated%20item&data=%7Bcat
```

2.3 Merging people profiles

Sometimes you'll want to merge two person profiles, when you know that it's the same person. It can be archived using the alias method. After person profiles are aliased, all existing data is merged to a single profile and any new data goes to the same person, even if recorded using different ids.

Warning There is no way to revert this operation, so be careful.

Method URL:

```
https://api.tracktor.io/alias
```

Parameters:

Name	Description
`sid`	Your application token
`ts`	Current Unix-style timestamp
`srcid`	Unique identity of source person profile
`destid`	Unique identity of destination person profile
`destsign`	*(optional)* Destination identity signature (See secure mode)

Example call:

```
https://api.tracktor.io/track?sid=00000000000&ts=1429186474&srcid=a-x123124123&destid=unicorn
```

Overview

Tracktor.io is an analytics product that shows you who uses your application and helps you to easily communicate with them via letters and in-app messages. With Tracktor.io you will receive at least the following information:

- The most popular and attractive pages of your site.

- At which steps your users usually stop while purchasing, upgrading or installing. Who these users are.

- Which advertisement campaigns bring active customers to your site.

- Which customers are leaving your site. You can ask them why they leave.

3.1 Sending Data to Tracktor.io

Tracktor.io features simple and easy to use HTTP api. Also, we have pre-built libraries for various languages. If you just want to start as quickly as possible, follow *Quick Start Guide*.

3.1.1 Language-specific APIs

- *JavaScript library*

- *.NET library*

Didn't find a library for your language? You can always use *HTTP API* directly.

3.1.2 People, Events and Properties

Tracktor.io processes data that is received from **people**, **events** and **properties**. In brief, we obtain information about who your users are and what they do on your site. It helps you to divide your users into segments. **Person** is the primary unit for all calculations and reports. Each person is automatically assigned a unique ID. Persons are divided into two main groups: Identified and Anonymous. They can be identified by email, Facebook ID, Twitter ID. If a person is not identified, he is considered anonymous. The examples of anonymous IDs are:

- a-3bxuAxl18r02UsdTUdk1Ri9;

- a-xrWNmprAoEJM507bt7m5LKg.

After Tracktor.io is integrated with your application or site, you can track a person's actions from the moment of the first visit and continue tracking him after his registration.

Events are actions that visitors do with your application. Here are some examples of possible events: Site visit, Home page visit, Landing page visit, Application download, Sign up, Opened Email, Subscription, Purchase. These are just a few examples of possible events.

Properties show additional information about users of your site. Properties give you valuable details about users, which allows you to divide them by segments. Let's take a look at a few examples of dividing users into segments by properties:

- Gender. You will be able to separate male and female users into different segments.

- City. Specifying "New York" or "London" will show you all users from corresponding cities.

- Age. By specifying "Age greater than or equal to 25", the application will create a segment with people who are at least 25 years old.

- Plan. If you specify Basic subscription plan, you will see all users which currently use your Basic subscription profile.

- Also, you can give properties any name you like.

3.1.3 What should I track?

You can choose which events you want to track with Tracktor.io. First, define your business goals. For example, you are the owner of a video service. Before a customer purchases a subscription or movie, he would perform one of the following actions: search, movie watch, review. With the knowledge of what a user does with your product, you can suggest your premium services to him, like subscription, premieres of the best movies, or valuable offers from your partners

3.2 Real-time Segmentation

Imagine you have 100000+ users. You need to send a newsletter only to users who have purchased a specific item in the last 2 months. Segments can help you with this. Tracktor.io gives you a wide range of conditions for grouping users into segments. A segment is a group of people which is defined by the rules or conditions that you set. Users are automatically added to a segment after you specify the segmentation rules. Segments are updated in real-time. If some users match the conditions specified by a segment, they are automatically added to that segment. Also, users are automatically deleted from the segment after removal from the People list.

Tracktor.io segments people by **Properties**, **Events** and **Companies**.

Tracktor.io can segment your users by **Properties**. The examples of properties are: City, Company, ZIP code, Country, Age. Properties can be managed at Account Settings -> User properties.

You can create a segment based on occurred **Events**. For example, you want to select all people who bought a specific product. First, you must create the Event, which will track the purchase of this product (i.e. Article2). Then, you can create a segment, which will be based on Article2 event.

With Tracktor.io you can group people by **Companies**. With this option you will see all people that belong to a specific company.

3.3 Dashboard, Metrics & Funnels

With the dashboard, which is called Analytics, you can look at the statistics of your site. Statistics are mainly represented by Metrics and Funnels, which are updated at least once every 2 hours. Also, you can update a specific Metric or Funnel individually by editing it.

3.3.1 How Funnels work?

With Funnels your customers will be able to see the conversion rate between events. Lets take as an example the funnel which has steps A,B,C,D. These steps can be done by a customer in a different order.

1. The steps A->B->C->D are done in this exact order. Tracktor.io will calculate this case as full conversion.

2. The steps are A->B->C->E->D. Tracktor.io will consider this sequence of steps as a conversion. Also, this case shows the example of a loose ordering.

3. The order of steps is: A->B->D. In this case Tracktor.io will not count this sequence as a conversion. The customer will not be shown in the funnel after step B.

The funnels are calculated based on unique users. Thus, you will see the exact number of customers who completed the steps in a funnel sequence.

3.3.2 How Metrics work?

Metrics show the performance of individual events and properties. Each metric shows you data both for predefined and for custom date ranges. Besides, from each metric you will receive information about daily maximum, minimum and average values.

3.3.3 Types of Metrics

With Tracktor.io you can create following types of metrics:

- **Number of People Who Did Event**

Here each person is counted maximum 1 time, even if he completed this event multiple number of times.

- **Number of Times Event Happened**

This metric counts each time the event was completed, regardless of the number of people involved. For example, this metric is suitable for calculation of unique Site visit.

- **Average Number of Times Event Happened Per Person**

It calculates the number of times an event was done, divided by the number of people who completed this event.

- **Conversion Rate**

Conversion Rate metric calculates conversion rate between two specified events. You can make it a repeatable event (product purchases for example) or a non-repeatable event (like an account signup).

- **Average Time Between Events**

It calculates time elapsed between completion of first event and second event, divided by number of people who completed both events.

- **Total Value for Property**

Total Value for Property metric Calculates total value of a numeric property across all people who meet a specific property criteria.

- **Average Value for Property**

The metric calculates total value of a numeric property, divided by either all people, by people who did a specific event, or by the number of times the property was set.

3.4 Tutorials

3.4.1 1.Tracking your first Event?

Any activity performed by your users can be sent to Tracktor.io. Events are used for sending this activity. To start tracking events first carefully read the information in section *Quick Start Guide*. We have two main groups of events: Auto events and Advanced events.

To configure **Auto events** in our system:

- Login to http://app.tracktor.io

- Go to Application settings

- Select "Auto Events" in the left panel

- Click "Add new event"

- In "Add event" dialog in put event name. Select "Page views" or "Element click" in "Generated by" field. For **Page views** you will see a quick guide with syntax and expression examples. Also, you can use our expressions testing tool. To configure an event on **Element click** you will have to input CSS selector. The list of available CSS syntax with examples of use can be found under the CSS selector field.

- After all fields are filled in click "Save" button

Besides User events our system already has built-in events - **Advanced events**. For using Advanced events:

- Go to Application settings

- Select "Advanced Events" in the left panel

- You will see a list of available advanced events. You can only enable/disable them. Currently we have three advanced events: Visited Site, Canceled Cart and Abandoned Cart. For *Canceled Cart* and *Abandoned Cart* events you can set the time of user inactivity after which the event will be generated

- Click "Save" button to save changes.

3.4.2 2.Creating your first Segment

If you don't need to send an email or in-app message to ALL your users, you can divide them into segments. With Tracktor.io tool you can create segments of users, based on 4 types of data: **Property**, **Event**, **Company** and **Asset Activity**.

For creating segment do the following:

- Go to People->Segments. Click "New segment"

- In the next window input desirable segment name

- Then define the conditions. As was told above, there are four conditions which you can use for segmenting people: Property, Event, Company and Asset Activity. Let's say you want to create a segment of people who visited a specific page at your application. For this page visit you have an Event, which is called "Item1" To create a segment based on this Event select "Event" in "Segment by" field. In "Users who" drop-down boxes select "have performed the event" and select event "Item1"

- When creating segments you can also use arguments and period of event occurrence. Also, you can add other conditions with "OR" and "AND" options

- Click "Create segment" button. You will see a window with list of segments. If your segment has few complex conditions, you will probably have to wait until it will be calculated.

3.4.3 3.Creating your first Funnel

Funnels are used for tracking steps which people do to become your customers. Once you understand at which steps people stop from being your customers, you will know which parts of your business requires the most attention. With this knowledge your business will engage more customers. Let's create your first Funnel with Tracktor.io. As an example let's take the case with your own video service provider. Here are the steps users would do to become you customers:

- **Site Visit**. This is the first step of your funnel.

- **Free movie view**. Let's imagine your service a list of free movies to watch. After watching them users would know that you give access to movies with great HD or UltraHD quality.

- **Registration** Lets imagine that in order to have even more movies in HD quality user has to make a registration.

- **Upgrade to a Premium paid plan** This is a paid service, which brings your company a real profit. This service gives a user an access the top-rated movies in HD and UltraHD quality. Also, this service gives access to Premiers and movies in 3D.

Having this funnel will give the information about steps, at which users stop before they actually start paying for your service. Now, lets create a Funnel. ####How to build your Funnel

- First, login to http://app.tracktor.io

- Then click Analytics tab at the top of the main window

- Click "Create new"->"Funnel"

- Input funnel name. Click small "+" button above "Save funnel" button

- In drop-down list of "Users who have performed the event" select **"Site visit"** event

- Click small "+" button above "Save funnel" button

- In drop-down list of "Users who have performed the event" select **"Free movies"** event

- Click small "+" button above "Save funnel" button

- In drop-down list of "Users who have performed the event" select **"Registration"** event

- Click small "+" button above "Save funnel" button

- In drop-down list of "Users who have performed the event" select **"Upgrade to Premium"** event

- Click "Save funnel" button

After these steps are done, you will see a diagram, showing you how many people finished each step. Click on event names with hyperlinks under diagram will show you a list of people that have passed each stage of a funnel. The table will show you ID, email and last action of each user. You can select a suitable date range, either predefined or custom.

Remember, that events will most probably be different. These names are suitable just for the example above. Also at any time you can add or remove steps from the funnel, or delete it.

3.4.4 4.Creating your first Metric

Tracktor.io supports creation of Metrics. With metrics you will be able to observe performance of the individual parameters of your site. The following is the example of Metric creation, where you want to see site visits during last month:

- Go to Analytics

- Click "Create new"->"Funnel"

- Select "Number of People Who Did Event" metric. Click "Next" button

- In "Specify metric parameters" window input metric name "Site visits". In "Event" drop-down list select **Site Visit** event

- Click "Add metric" button.

After these steps you will see the Analytics Dashboard. It contains all Metrics and Funnels in one place. Here, you will see your "Site visits" metric as a block with small histogram. By default, it will show you the number of site visits for this week. To view the "Site visits" metric in detail do the following:

- Click on metric name to open it

- You will see a diagram where the default time range is "Last 7 days"

- In Date range drop down list select the desired time period

- To the left of the diagram additional statistics will be shown: Daily maximum, Daily minimum, Daily average and Number of people who did this event.

3.4.5 5.Creating your first Workflow Campaign

With the **Workflow Campaigns** feature you can create truly effective, flexible campaigns. Campaigns have notable advantages over ordinary newsletters. First, they work in a real time. Second, they have rich toolbox which includes triggers, filters and actions. And last but not least, you can observe the amount of executed actions with a schematic diagram (or as we call it - working area). Again, lets take as an example a video service provider. You need to send a special proposal letter to all users who are still on a free account and have watched movies at least 20 times. For creating Workflow campaign do the next steps:

- Go to Campaigns-> Workflow

- Click the "New Campaign" button at the upper right corner of the window

- In the next window input the campaign name and click "Add" button

- A window for editing workflow campaigns will be opened. It is divided into three parts: a toolbox, a working area and a block with letters list

- Leave "For all people" block as it is

- Select trigger "Person Event". In the events drop-down list select "Movie watch"

- Next, select the "Entry limit" filter. Input 20 to "Entries count limit" field

- Select the Person property filter with NOT free Plan. Connect this property to "No" of "Entry limit" filter

- In Toolbox select "Sent Letter" action. Compose an email that you are going to send and attach it to "Sent letter" action

- Connect "Send letter" action to the Yes option of the Person property filter

- Click Save. Click "Run"

Now your campaign will instantly send your newsletter to each user who watched at least 20 movies and has Free subscription plan. Once the campaign is active, you can monitor its performance in a real time. All information about your campaign is gathered in one place, which makes it very easy to use for your whole team.

3.4.6 6.Creating your first Newsletter

Newsletters play a powerful role for communication with your customers. For creating a **Newsletter**:

- Go to Campaigns->Manual

- Click "New Campaign" button

- Input campaign name and specify whether it will be sent to all users, or to specific segments. Click "Save settings"

- Click "Edit content"

- In the "Asset settings" dialog window input letter subject and sender

- Tracktor.io gives you the opportunity to create a newsletter in three different modes: Drag&Drop, Html WYSI-WYG and Plain text

- For our example we select the Drag&Drop letter type. You will see the Drag&Drop editor, where you must click the "Choose layout" button. Leave "One column" as default and click "Choose"

- Then you can edit the template by adding there required text, pictures and links. To edit different sections and blocks of your newsletter - select them and modify using the editor in the right part of the window

- By clicking the "Preview" button you can see the final appearance of the letter to be sent

- When editing is done click "Save and Close". "Edit Newsletter Campaign" window will be opened Click "Send Campaign" for sending your newsletter to specified recipients.

After the letter is sent, you will see how many letters were sent, opened, or bounced, and how many times links were clicked. Also, you will be able to observe the results of your campaign in detail with the "Letter statistics detail" chart and in the "Letter activity" table. The Letter activity table will show you detailed results for every recipient, which will include: Status, Person ID, Email, Subject, Opens and Clicks. By clicking on subject of the letter you will see a letter preview in a separate window.

3.4.7 7.Adding another application

You can integrate Tracktor.io with few different applications. For adding a new application do the following:

- On a main screen point a mouse on a current site name. Click "Manage"

- Above sites list click "Add new site"

- Input your integration settings in the next window. Click "Re-check" button to verify integration settings

- Next, input communication widget settings and Save changes.

To remove a site or application go to Account Settings->Sites. Click the "Remove" button to remove the site.

3.4.8 8.Sending a manual in-app message

With our built-in in-app messenger you will be able to manually send messages to chosen users. To do this you have to:

- Go to people list

- Select either all people on the list or select them one by one. You will see a green button above the people list table. Click it

- Select the "Send Message" option

- Input message text

- You will have two options for sending this message: in-app message and Email. In-app is set by default

- Click "Send". The message will be sent to all selected users. They will see it after they log in to your application. With our in-app messenger they will be able to answer you. All messages will be automatically transferred to conversations section of our site.

JavaScript library reference

4.1 Installation

To install Javascript library, you should get a snippet that can be found at *Application settings->Integration settings* and drop it into the `head` of your site. It looks like this:

```
<script type="text/javascript">
  (function() {
    window.tio = window.tio || [];
    var d = document, f = d.getElementsByTagName('script')[0],
    t = 'YOUR_TOKEN_HERE',
    s = d.createElement('script'), m = ['track', 'identify','setProperties'],
    r = function (e) {return function () { tio.push([e].concat(Array.prototype.slice.call(arguments,
    s.type = 'text/javascript'; s.async = true; s.src = 'https://tracktor.s3.amazonaws.com/scripts/'
    f.parentNode.insertBefore(s, f); for(var i in m) tio[m[i]] = r(m[i]);YS=tio; })();
</script>
```

After that, you can find Tracktor.io library methods within `tio` namespace. Library uses HTML5 Local storage to keep track of current user identity and falls back to cookies if it's not available.

4.2 People api

4.2.1 tio.identify(personId)

When a person opens a page with tracking script the library automatically generates unique anonymous id, like `a-3bxuAxl18r02UsdTUdk1Ri9`. All events you track will be assigned to this id. But when person signs in, you'll want to identify him with different id you provide. This can be any unique string that identifies this person: user id in database, login, email (only if it cannot be changed).

Sample call:

```
tio.identify('unicorn');
```

If the current person identity is anonymous, all it's data is merged into the provided profile. This way you can start tracking user activity from the point when you don't know who it is and merge all data when this user signs in or registers.

If the current person identity is non-anonymous, this method just switches current person without merging any data.

4.2.2 tio.setProperties(properties)

You can set any additional info about current person by calling this method. A person property can have any data type you want. It can even be an array or object. However, there are some predefined properties, that have fixed data type. You can read about them here.

Sample call:

```
tio.setProperties({
  email: 'unicorn@example.com',
  first_name: 'Dave',
  last_name: 'Johnson',
  age: 25,
  billing_plan: 'free'});
```

Note: if a person already has some property and it's not specified in properties object, it won't be changed. If you want to remove a particular property, you should assign `null` value to it: `{delete_me:    null}`

4.2.3 tio.track(eventName, args)

To track an event for the current person, you should call `track` method. Just like with `setProperties` method, `args` parameter must be an object with any properties you need.

Sample call:

```
tio.track('rated-product', {
  productid: 33156,
  category: 'Consumer electronics',
  rating: 5,
  comment: 'Very good product!'});
```

4.3 Secure mode

Due to the way we receive person data and events, it is possible to fake person identity by third person (attacker). Attacker can send any event "from" any other person, which may force person to enter invalid segment or trigger workflow campaign that should not be run for that person. But the most dangerous thing is that attacker can access conversation log, which may contain sensitive data.

In order to avoid this issue, we implemented **Allow only signed data** option.

This option ensures that Tracktor will receive only data that has valid signature. To do that, you must generate signature of person identity with HMAC-SHA256 algorithm, using signature secret provided. This signature must be generated on server side of your application, so attacker won't be able to access the secret code.

Example usage: For example, your secret code is `2D8CarQ4rX3WvH6TK7DpJDk5`, person identity - `5115`

1. Generate signature of person identity on backend:

```
// C#
private string GenerateSignature(string key, string identity)
{
    var keyBytes = Encoding.UTF8.GetBytes(key);
    using (var hmac = new System.Security.Cryptography.HMACSHA256(keyBytes))
    {
        var signature = hmac.ComputeHash(Encoding.UTF8.GetBytes(identity));
        return BitConverter.ToString(signature).Replace("-", string.Empty);
    }
```

```
}

var signature = GenerateSignature("2D8CarQ4rX3WvH6TK7DpJDk5", "5115");
// 9622E88BED0B5BC186286CB9504A02E5F3B4207DCA0AB23CA4FBDDFC15627E2F
```

2. Send both identity and signature on frontend, as you usually do.

3. Make identify call with signature:

```
tio.identify('5115', '9622E88BED0B5BC186286CB9504A02E5F3B4207DCA0AB23CA4FBDDFC15627E2F');
```

4. Enable **Allow only signed data** option

5. Now you are protected from identity theft

4.4 In-app messenger widget

Javascript library is bundled with a messenger widget that provides in-app style messaging with users. Widget settings can be configured via Tracktor's UI, but you can override them dynamically, if you need to.

All available settings are provided in following example:

```
tio.setMessengerConfig({
    icon: 'https://cdnjs.cloudflare.com/ajax/libs/fatcow-icons/20130425/FatCow_Icons32x32/world.png',
    welcomeText: '', // override text, that person sees when opens widget, that has no conversations
    headerIcon: '', // override icon to the left of header text
    headerText: 'Tracktor.io Messenger',
    positionX: 'right', // right/left
    positionY: 'bottom', // top/bottom
    iconMargin: {
        "X": "10px",
        "Y": "10px"
    },
    display: true // display: false would hide widget
});
```

You can specify only options that you want to override:

```
if (/* Widget should be hidden */) {
  tio.setMessengerConfig({ display: false }); // Hide widget
}
```

4.4.1 Binding to messenger events

Messenger widget provides some events you can bind to:

tio-messenger-opened - occurs when person opens the widget

tio-messenger-closed - occurs when person closes the widget

tio-message-sent - occurs when person sends new message

tio-message-received - occurs when new user message received, during widget closed state

Binding to events with JQuery:

```
$(document).on('tio-message-sent', function (e) {
  console.log('message sent: ' + e.originalEvent.data.msg);
});
```

Binding to events with pure JS (cross-browser)

```
function addEvent(el, eventType, handler) {
  if (el.addEventListener) { // DOM Level 2 browsers
    el.addEventListener(eventType, handler, false);
  } else if (el.attachEvent) { // IE <= 8
    el.attachEvent('on' + eventType, handler);
  } else { // ancient browsers
    el['on' + eventType] = handler;
  }
}

addEvent(document, 'tio-message-sent', function (e) {
  console.log('message sent: ' + e.data.msg);
});
```

4.5 E-commerce extension

We have a specialized extension for e-commerce applications. With our e-commerce api, you can track purchased, canceled and abandoned carts.

4.5.1 Cart object

Most of the following methods operate with cart object that must have following structure:

```
{
    totalprice: decimal, // total cart price, including any additional fees
    products:
    [
        {
            name: string, // name of the product
            price: decimal, // price of single product
            count: integer, // (optional) product quantity (1 by default)
            thumburl: string, // (optional) url to product's thumbnail image
            custom_property: any_type // You can attach any additional properties, if you need
        }
    ],
    custom_property: any_type // You can attach any additional properties, if you need
}
```

Generally, a cart can have any additional properties you need. Here's a sample cart object:

```
{
    totalprice: 3.98,
    products:
    [
        {
```

```
        name: "Marshmallows 1kg pack",
        price: 1.99,
        color: "green"
    },
    {
        name: "Zephir 1kg pack",
        price: 1.99
    }
],
paid_with: "Credit card",
card_type: "VISA",
shipping_method: "in-store pick up"
}
```

4.5.2 tio.setCart(cart)

After you set a cart, abandoned cart tracking mode is activated. When api doesn't receive any cart data for a configurable amount of time, the cart is assumed abandoned and `Cart abandoned` event is generated inside Tracktor.io. You can set a workflow on this event, to return the person to your store and encourage them to make the purchase.

4.5.3 tio.cancelCart(cart)

If a user cleans up your cart, you should call this method to stop abandoned cart tracking.

4.5.4 tio.purchaseCart(cart)

Marks cart purchased and generates `Cart purchased` event