

Google Tag Manager: Visitor UUID Cookie Setter Tag

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Sometime you want to generate UUID for visitors on your web property and set UUID as cookie. I want to show how easy it is to set your own visitor UUID cookie using Google Tag Manager(GTM). Once visitor UUID cookie is set you can pass this UUID to other tags. Normally most of tags set tag specific UUIDs but by setting your own UUID you can manage your own cookie match table with your own UUID as primary key.

So lets get started. We are gone create a custom HTML tag `visitorUUID` in GTM using custom HTML tag and following template.

```
<script type="text/javascript">
(function() {
  // UUID generator
  // Private array of chars to use
  var CHARS = '0123456789
    ABCDEFGHIJKLMNOPQRSTUVWXYZabcdefghijklmnopqrstuvwxyz'.split('');

  // RFC4122v4 compliant uuid generator
  Math.uuid = function() {
    var chars = CHARS, uuid = new Array(36), rnd=0, r;
    for (var i = 0; i < 36; i++) {
      if (i==8 || i==13 || i==18 || i==23) {
        uuid[i] = '-';
      } else if (i==14) {
        uuid[i] = '4';
      } else {
        if (rnd <= 0x02) rnd = 0x2000000 + (Math.random()*0x1000000)|0;
        r = rnd & 0xf;
        rnd = rnd >> 4;
        uuid[i] = chars[(i == 19) ? (r & 0x3) | 0x8 : r];
      }
    }
    return uuid.join('');
  };
})();

function createCookie(name,value,days) {
  // Cookie setter function
  if (days) {
    var date = new Date();
    date.setTime(date.getTime()+(days*24*60*60*1000));
    var expires = "; expires="+date.toGMTString();
  }
  else var expires = "";
  document.cookie = name+"="+value+expires+"; path=/";
}

// Generate and set visitorUUID cookie with expiry after 1 year i.e. 365
days
createCookie("visitorUUID", Math.uuid(), 365);
```

```
</script>
```

This template has 3 key components,

1. RFC4122v4 [compliant](#) uuid generator `Math.uuid` (Adopted from work of [Robert Kieffer](#))
2. A generic cookie setter function `createCookie`
3. Finally, expression to generate UUID and set `visitorUUID` cookie with expiry after 1 year (i.e. 365 days)

Set the priority for the tag higher using advanced settings in case other tags rely on the `visitorUUID` cookie.

Create New Tag

Tag Name

Providing a descriptive name will help you identify and reference this tag.

Tag Type

Custom HTML can be used to include any supported tag ([see unsupported tag types](#)). Do not use tags meant for A/B testing.

Copy and paste your HTML/Javascript into the textbox. Be sure to wrap Javascript snippets with `<script></script>`.

For advanced customisation: You can insert macros into your custom HTML tag by wrapping the macro name with `{{macro_name}}`. This can be helpful for tag reuse in multiple contexts.

HTML

```
<script type="text/javascript">
(function() {
  // Private array of chars to use
  var CHARS =
  '0123456789ABCDEFGHIJKLMNORSTUVWXYZabcdefghijklmnopqrstuvwxyz'.split('');

  // RFC4122v4 compliant uuid generator
  Math.uuid = function() {
    var chars = CHARS, uuid = new Array(36), rnd=0, r;
    for (var i = 0; i < 36; i++) {
      if (i==8 || i==13 || i==18 || i==23) {
        uuid[i] = '-';
      } else if (i==14) {
        uuid[i] = '4';
      } else {

```

Support document.write

Google Tag Manager is offering a new engine for rendering custom HTML tags. It includes support for calls to `document.write()`.

Figure 1: RFC4122v4 compliant Visitor UUID GTM Tag

Now lets create a macro `visitorUUID` which reads first party cookie `visitorUUID` and set value in the macro. We are going to use this macro for the firing rule. Please note other tags can use this macro to get value of our UUID cookie.

Create New Macro

Macro Name

Macro Type

The value is set to the first value of the 1st party cookie with the matching name.

Cookie Name

Figure 2: Visitor UUID Cookie Macro

Now it is time to set the firing rule for this tag. This tag should fire,

1. On all pages, after DOM is ready, and
2. Only when UUID cookie is not set

To find if UUID cookie is not set or not - we are looking for – character in the `visitorUUID` macro. If `visitor UUID` cookie is not set then condition `visitorUUID` macro does not contain character – will be true and hence tag will fire and set the cookie. Create the rule as illustrated below and attach it to our tag.

Rule Name

visitorUUIDRule

Conditions

The rule is considered matched only when every condition below is satisfied.

{{url}}	matches RegEx	.*	-
{{visitorUUID}}	does not contain	-	-
{{event}}	equals	gtm.dom	- +

Figure 3: Visitor UUID GTM tag firing rule

That's it, your visitor UUID tag is ready for action.