

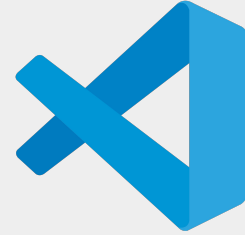
Digital Playground for Server Side Tagging

How do you play with and try Server Side tagging?
I'll explain my own dev setup



My Jamstack and setup

"Jamstack" was originally coined as "JAMstack" where "JAM" stood for JavaScript, API & Markup.

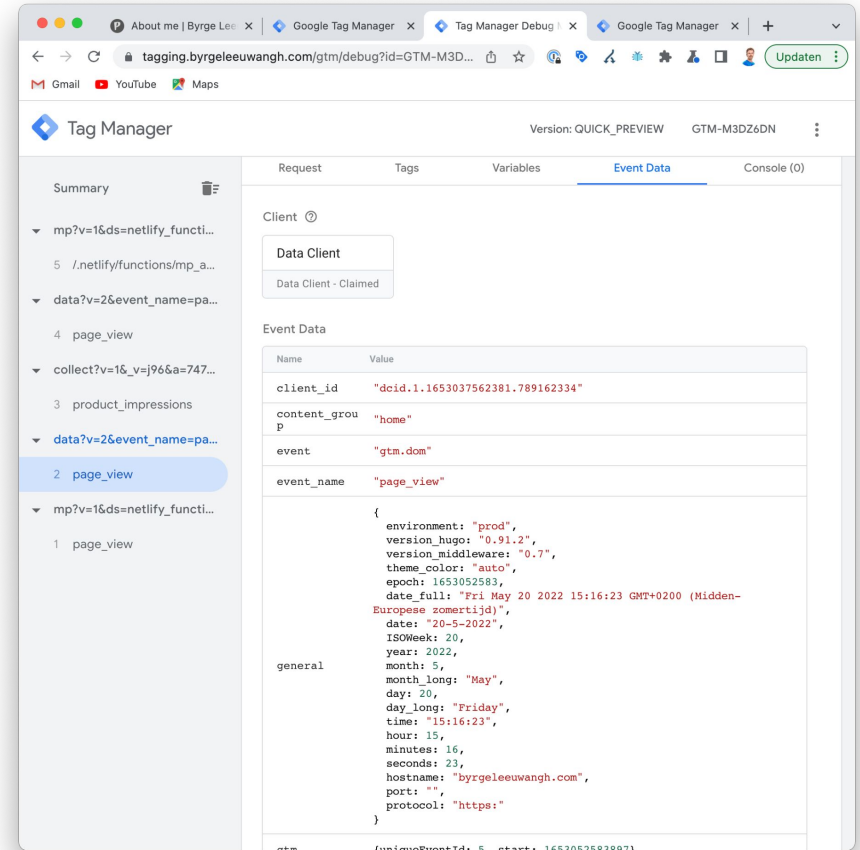


My Setup

- Microsoft Visual Studio Code
 - Javascript & Go
- Hugo as a SSG (Static Site Generator)
 - Created my own middleware for analytics
- Publish my code to Github
- Enabled auto deployment to Netlify
 - Netlify as hosting platform
- Netlify function for server to gtm server tagging
- Netlify function for server side cookies
- Stape.io as my GTM Server setup

Client-side to GTM Server

1. Go code in my hugo project creates data attributes in the HTML code per blog item
2. I have a Middleware solution that creates a dataLayer event from data attributes in the HTML code at the moment the content is in the viewport
3. GTM client-side has a Data Tag which sends the dataLayer to GTM Server



The screenshot displays the Google Tag Manager interface in a browser window. The URL is `tagging.byrgeleuwangh.com/gtm/debug?id=GTM-M3D...`. The interface shows the 'Event Data' tab selected, displaying the following data:

Name	Value
client_id	"dcid.1.1653037562381.789162334"
content_group	"home"
event	"gtm.dom"
event_name	"page_view"

Below the table, the 'general' section shows a JSON object representing the dataLayer:

```
{
  environment: "prod",
  version_hugo: "0.91.2",
  version_middleware: "0.7",
  theme_color: "auto",
  epoch: 1653052583,
  date_full: "Fri May 20 2022 15:16:23 GMT+0200 (Midden-Europese Zomertijd)",
  date: "20-5-2022",
  ISOWeek: 20,
  year: 2022,
  month: 5,
  month_long: "May",
  day: 20,
  day_long: "Friday",
  time: "15:16:23",
  hour: 15,
  minutes: 16,
  seconds: 23,
  hostname: "byrgeleuwangh.com",
  port: "",
  protocol: "https:"
}
```


GTM Server

1. A Measurement Protocol Client listens to the mp request on /mp
2. The mp request is picked up by a Google Universal Analytics Tag and send to Google Analytics

Function log

Filter by request ID, message, log level

```
May 20, 03:23:47 PM: 73b0a736 INFO Netlify context decoded <>< {
  identity: {
    url: 'https://byrgeleewangh.com/.netlify/identity',
    token: 'eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJleHAiOjE2NTMwNTMwODYsInN1YiI6IjAifQ.ZwLb1-c6bjaPI7drjZ5HY6rvG4VBG82VAJv
  },
  site_url: 'https://byrgeleewangh.com'
}
May 20, 03:23:47 PM: 73b0a736 INFO parsedContext <>< {
  identity: {
    url: 'https://byrgeleewangh.com/.netlify/identity',
    token: 'eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJleHAiOjE2NTMwNTMwODYsInN1YiI6IjAifQ.ZwLb1-c6bjaPI7drjZ5HY6rvG4VBG82VAJv
  },
  site_url: 'https://byrgeleewangh.com'
}
May 20, 03:23:47 PM: 73b0a736 INFO mp - started:
May 20, 03:23:47 PM: 73b0a736 INFO user_document_location <><>>>>> https://byrgeleewangh.com/about-me/
May 20, 03:23:47 PM: 73b0a736 INFO /about-me/
May 20, 03:23:47 PM: 73b0a736 INFO no params > direct
May 20, 03:23:47 PM: 73b0a736 INFO mp - analyticsRequestBody: https://tagging.byrgeleewangh.com/mp?v=1&ds=netlify_functi
May 20, 03:23:47 PM: 73b0a736 INFO ""
May 20, 03:23:47 PM: 73b0a736 Duration: 447.26 ms Memory Usage: 65 MB Init Duration: 215.64 ms
```

Netlify function => request [mp] to
tagging GTM Server => Google
Universal Analytics

The screenshot shows the Google Tag Manager interface. The browser address bar displays the URL: `tagging.byrgeleewangh.com/gtm/debug?id=GTM-M3D...`. The interface is titled "Tag Manager" and shows the configuration for a "page_view" tag. The "Output of GTM-M3DZ6DN" section is active, showing a table with columns for Request, Tags, Variables, Event Data, and Console (0). The "Tags Fired" section lists "GA - UA - page view" and "Google Analytics: Universal Analytics - Succeeded". The "Tags Not Fired" section lists "GA4 - Analytics", "Conversion Linker", and "GA4 - page_view", each with its corresponding Google Analytics ID.

Request	Tags	Variables	Event Data	Console (0)
	GA - UA - page view			
	Google Analytics: Universal Analytics - Succeeded			

GA4 - Analytics	Conversion Linker	GA4 - page_view
Google Analytics: GA4	Conversion Linker	Google Analytics: GA4

GTM Server

1. A Data Tag Client listens to the data request on `/data`
2. The data request is picked up by a Google Analytics 4 Tag and send to Google Analytics

The image is a composite of three screenshots illustrating the process of sending data from a client-side application to the Google Tag Manager (GTM) server.

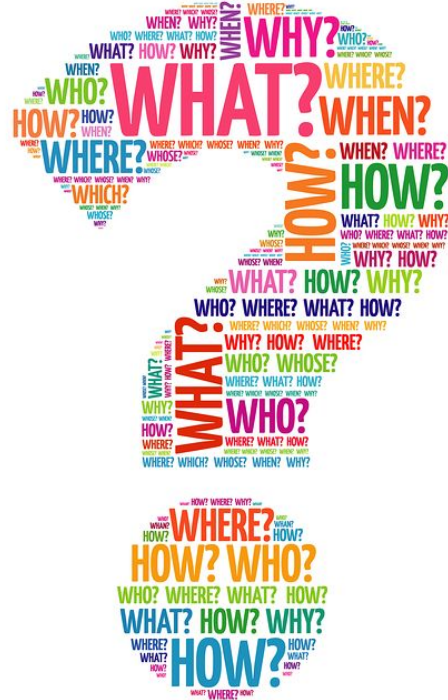
- Left Screenshot (Browser):** Shows the website 'byrgeleeuwangh.com'. The page content includes a header with navigation links, a 'Hi there' greeting, a bio for 'Byrge Leeuwangh' (Technical Web Analyst), and two blog posts: 'Structured Content With Google Tag Manager' and 'Debug your app with a proxy'.
- Middle Screenshot (Network Debugger):** Shows a network request to 'data?v=2&event_name=pag...'. The request payload is expanded, showing GTM event data:


```

      {
        "event": "gtm.dom",
        "content_group": "home",
        "event": "gtm.dom",
        "event_name": "page_view",
        "general": {
          "environment": "prod",
          "version": "0.7"
        },
        "date": "2022-05-20",
        "date_full": "Fri May 20 2022 16:14:31",
        "day": "20",
        "day_long": "Friday",
        "environment": "prod",
        "epoch": "165385671",
        "hostname": "byrgeleeuwangh.com",
        "hour": "16",
        "minutes": "14",
        "month": "5",
        "month_long": "May",
        "port": "",
        "protocol": "https",
        "seconds": "31",
        "theme_color": "auto",
        "time": "16:14:31",
        "version_hugo": "0.91.2",
        "version_middleware": "0.7",
        "year": "2022"
      }
      
```
- Right Screenshot (GTM Debug Console):** Shows the 'page_view' tag configuration in the GTM interface. The 'Tags Fired' section shows 'GA4 - page_view' as 'Succeeded', while 'GA - UA - page view' and 'GA4 - Analytics' are listed as 'Not Fired'.

GTM client-side => request [Data Tag] to tagging GTM Server => GA4

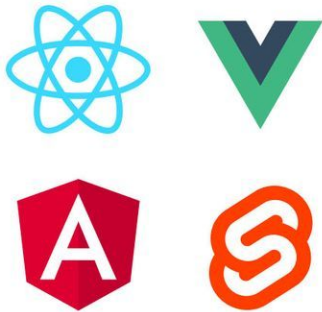
Questions?



How do you play with GTM Server?

J

Javascript



A

APIs



M

Markup

