

title: Resource Timing description: How Sematext Experience collects external resource data such as downloaded images, CSS files, and JavaScript files

Experience collects resource timing data such as downloaded images, CSS and JavaScript files. When someone visits your website the browser will begin downloading resources. These resources can have a big impact on your website's loading speed.

The same process happens in single-page apps when users navigate to a different part of the web app.

There are two ways to see resource performance data in Experience.

## Resource Waterfall

Open the details page for some page load to access the Resource Waterfall table.

This table shows the downloaded resources ordered by the time they were discovered. Each row shows different stages of the download process.

You can sort the waterfall by Size, Load Time, Time to Loaded, and Time Started (Waterfall).

Let's explain what each of these mean:

- **Size** - is the transferred size of the resource. Size will be "Unknown" if it's not available due to CORS restrictions.
- **Load Time** - is the time it took to download the resource once the fetch started
- **Time to Loaded** - the time from when the page load got initiated to when this resource got downloaded
- **Time Started** - is the time when browser queued this resource for download

## Resource Overview

The Top Resources table on the Overview page shows the site-wide performance for resources. The table is sortable by each column.

- **Hits** - is the number of times the resource got requested
- **Size** - is the average size of the resource
- **DNS Lookup** - is the time it took to lookup the domain with DNS
- **TCP Handshake** - is the time it took to establish TCP connection
- **SSL Handshake** - is the time it took to perform the handshake process for securing the connection
- **Request** - is the average time it took for the server to process the request
- **Response** - is the average time it took for the browser to download the resource once it was processed by the server
- **Total** - is the average total time it took to fetch the resource. This time also includes the time the resource spent in the browser queue for fetching.

Some of these timings are not available for CORS resources as you can see below.

### **Cross-Origin Resource Sharing (CORS) restrictions**

When CORS is in effect, many of the timing properties are zero, unless you adjust the server access policy. To relax the policy, the server should return the “Timing-Allow-Origin” HTTP response header. The header should list all domains that can access these restricted properties.

If you control the server that is providing the resource you should add this header to each response. You can use “\*” to allow any domain, or the exact name(s) of the domain where the Experience script is collecting data. For example:

`Timing-Allow-Origin: *`

or

`Timing-Allow-Origin: www.mysite.com`