

SEO Page Generator



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SEO Page Generator Overview

SCA websites use the Single-Page Application (SPA) model for enhanced user experience. SPAs are web applications that load a single HTML page and dynamically update that page when the user interacts with the application so that the page load time is reduced. Code such as HTML, JavaScript, and CSS are retrieved on the first page load, and pages are not reloaded during customer interaction. The SEO page generator is at work behind the scenes rendering your webpages so that search engine bots such as Google and Bing can easily index your webpages. This is necessary because some search engine web crawlers cannot interpret JavaScript code.

Note: When you combine the SEO page generator and SEO best practice on your site, you can positively impact your ranking on search results pages.

When a shopper or web crawler visits your site, the SEO page generator executes the JavaScript code and Ajax request just as a browser would. This builds the HTML content and returns it to the shopper or web crawler. Even shoppers without JavaScript capability receive the HTML content. If the shopper stays on the page and the browser can execute JavaScript, subsequent requests are fulfilled by AJAX requests, and the SEO page generator is not engaged.

The most frequently requested URLs are cached so search engine bots can index your site quickly. If the rendered page has already been generated, it is stored in the CDN cache to speed up delivery.

Note: The SEO page generator operates only on websites that have the View Homepage touch point defined.

To learn more about the SEO page generator, refer to the following sections:

- [SEO Page Generator Debug Log](#)
- [SEO Page Generator Best Practices](#)

SEO Page Generator Debug Log

The SEO page generator gives you a comprehensive logging feature that lets you analyze page generation data. The log includes memory and CPU usage data for tracking resources. It also includes all requests produced by the SEO page generator.

Note: The following procedures are for testing your site on a public domain. You cannot view the website on a local host environment when JavaScript is disabled.

To view the debug log provided by the SEO page generator:

1. Go to your website home page, for example, <http://www.mywebstore.com>.
2. Right click on the page and click **View page source**.
3. Modify the URL of the page by appending `?seodebug=T` at the end of the URL and then reload the page.

For example, modified URLs look similar to the following:

```
view-source:www.mywebstore.com/?seodebug=T
view-source:www.mywebstore.com/Salida-Backpack?seodebug=T
```

4. Scroll down to the bottom of the source code to view the debug log generated by the SEO page generator.

A debug log looks similar to the following:

```
[05:37:52.328] [ +2290 ms ] Got a response from Prerender
[05:37:52.331] [ +3 ms ] Memory usage:      14.355469MB
[05:37:52.331] [ +0 ms ] CPU usage:         0.280000s
[05:37:52.331] [ +0 ms ] Sub request total: 1.494000s
[05:37:52.331] [ +0 ms ] Details of 8 sub requests:
    GET http://www.mywebstore.com/shopping.environment.ssp?lang=en_US&cur=null&X-SC-
    Touchpoint=shopping&t=1491975947658 [status 200]
    Requested at 2017-05-30T12:37:50.393Z and responded by 2017-05-30T12:37:51.199Z
    (which took 806ms)
    GET http://www.mywebstore.com/languages/shopping_en_US.js?t=1491975947658 [stat
    us 200]
    Requested at 2017-05-30T12:37:50.394Z and responded by 2017-05-30T12:37:50.690Z
    (which took 296ms)
    GET http://www.mywebstore.com/javascript/shopping.js?t=1491975947658 [status 20
    0]
    Requested at 2017-05-30T12:37:50.394Z and responded by 2017-05-30T12:37:51.197Z
    (which took 803ms)
    GET http://www.mywebstore.com/cms/2/assets/js/postframe.js [status 200]
    Requested at 2017-05-30T12:37:50.395Z and responded by 2017-05-30T12:37:50.995Z
    (which took 600ms)
    GET http://www.mywebstore.com/cms/2/cms.js [status 200]
    Requested at 2017-05-30T12:37:50.395Z and responded by 2017-05-30T12:37:50.792Z
    (which took 397ms)
    GET http://www.mywebstore.com/api/cms/session/domain [status 200]
    Requested at 2017-05-30T12:37:51.390Z and responded by 2017-05-30T12:37:51.489Z
    (which took 99ms)
    GET http://www.mywebstore.com/api/cms/versions?site_id=2&c=420420 [status 200]
    Requested at 2017-05-30T12:37:51.492Z and responded by 2017-05-30T12:37:51.589Z
    (which took 97ms)
    GET http://www.mywebstore.com/api/cms/pages/contents?c=420420&n=2&page_type=home
    -page&path=%2c=420420 [status 200]
    Requested at 2017-05-30T12:37:51.593Z and responded by 2017-05-30T12:37:51.692Z
    (which took 99ms)
```

If the website page view that you are investigating is served from cache, the entire debug log is not displayed. In this case, you might see a truncated output similar to the following:

```
Parameter from url: seodebug=T:
[23:03:05.713] [ +8 ms ] Requested URL with SEO generator relevant params: http://www.mywebs
tore.com/?seodebug=T
[23:03:05.713] [ +0 ms ] Source URL: http://www.mywebstore.com/shopping.ssp?seodebug=T
[23:03:05.713] [ +0 ms ] Rewrite Path: /s.nl?sitepath=/shopping.ssp
[23:03:05.723] [ +10 ms ] SEO generator page taken from cache: com.netledger.app.site.ignite.
cache.NLIgniteResponseCacheEntry@5430dc72
```

To generate the debug log when the page is served from cache:

1. Go back to the website page view that you are investigating.
2. Add the `preview` parameter with a unique number at the end of the page view URL and reload the page. The intention here is to give the browser the illusion that it is loading a unique page.

For example, modified URL look similar to the following:

```
http://www.mywebstore.com/Salida-Backpack?seodebug=T&preview=1234
```

3. Right click on the page and click **View page source**.
4. Scroll down towards the bottom of the source code to see the entire debug log provided by the SEO page generator.

Note: A subsequent request to the same URL is served from cache.

SEO Page Generator Best Practices

When you customize your website, it is important you consider the following SEO page generator best practices:

- Optimize your JavaScript and use minimal AJAX calls to shorten the time it takes to generate the page HTML. The optimized site can help improve ranking on search results pages because faster loading sites are ranked higher than slower sites.

Note: SuiteCommerce Advanced websites must load in under 20 seconds.

- After customizing a page, test it in all main browsers and resolve any JavaScript errors.

Note: You should consider the SEO page generator as another browser that should be tested in addition to Google Chrome, Mozilla Firefox, Safari, Microsoft Edge, or Internet Explorer.

- You should exclude certain elements from SEO page generation. This is useful for embedded, third-party components with external URLs that might consume excessive JavaScript memory or repeatedly poll external URL.

The following example demonstrates this exclusion:

```
if(!SC.isPageGenerator()){
  // Insert non-page generator content here
}
```

- Use jQuery instead of DOM for better results in the SEO page generator.
- In the following situations, wrap the code in a statement to exclude it from SEO page generation:
 - You should not initialize UI intensive jQuery plug-ins on the SEO page generator because they might slow your page down.
 - You should not use the `setTimeout()` and `setInterval()` methods on the SEO page generator because they might cause the SEO page generator to timeout.
 - You should not use the `animate()` jQuery method on the SEO page generator.

For example, you can wrap your code in a statement similar to the following to indicate that it is only for display in the browser:

```
if(SC.ENVIRONMENT.jsEnvironment === 'browser'){
  // Insert non-page generator content here
}
```

- Use only functions supported by the ECMAScript version 5(ES5) standard.

- If you are making multiple HTTP requests, and you implicitly rely on certain order of execution, your code might be forced to non-expected code paths or states.