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Why is My Sitecore Website So Slow?

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Sitecore websites should load fast. It's as simple as that. If that's not the case, there's a problem. Fortunately, there's always a fix. You just need to know where to look.

If your Sitecore implementation is suffering from <u>performance issues</u>, we've put together a quick guide for your developers on where to look first. Read on to learn more about how they can improve your Sitecore performance.

1. Your Sitecore databases haven't been properly maintained

Much of Sitecore's functionality relies heavily on MSSQL indexes. For your site to load quickly (and to continue to load quickly), these indexes need to be regularly maintained and updated. Think of this like periodic maintenance on your car. If you're not keeping up with oil changes, tire rotations, and more, your car won't perform at its best.

The same goes for Sitecore. If you aren't maintaining your indexes, you can expect to have a very slow Sitecore website.

Without regular maintenance, indexes are prone to become fragmented. As a result, it will take much longer for Sitecore to retrieve data. Over time, this leads to a frustratingly slow site experience that causes your visitors (and potential customers) to leave.

2. You're using an underpowered hosting environment

Your Sitecore website can only perform as well as your hosting environment enables it to. Underpowered hosting environments can create a few problems for Sitecore websites.

For example, your hosting environment may be insufficient for your site's traffic needs. You may not have enough instances deployed, or the instances you do have may not have enough CPUs to handle your traffic.

Even when your hosting environment *should* be sufficient to support your traffic load, you can still run into issues if it's not configured correctly. For example, if you've chosen Azure PaaS to host your Sitecore implementation (<u>which we strongly</u>



<u>recommend</u>), your app services must be configured to use the correct tier; otherwise, your site load time will suffer.

On the other hand, If you're on physical hardware, you need to have the right version of SQL Server to support your traffic needs. Often teams try to reduce costs of SQL Server Enterprise by using SQL Server Professional instead. However, most high-traffic sites require SQL Server Enterprise as it poses no limits on your CPUs or system RAM, allowing your site to maintain optimal performance.

3. Your partner didn't follow implementation best practices

Best practices are called best practices for a reason. When people don't follow them, things tend to fall apart.

For Sitecore, <u>best practices</u> means:

- Having a well-defined content structure based on a mutually-agreed upon Sitecore Architecture document, enabling your partner to size your environment appropriately, with sufficient Content Delivery (CD) instances, databases, and RAM and CPU resources.
- 2. Leveraging search indexes to locate content. This is the single fastest way for Sitecore to retrieve content from various places in the Sitecore content tree whenever it's needed. Using search indexes is like looking up a book at your library using their online card catalog, while other methods are more like wandering up and down the aisles scanning the titles of books.
- 3. Following a rock-solid QA process to test all new features before they go live, to ensure that everything is working as it should be.

If your partner didn't follow these practices when implementing your site, you're going to run into issues. Of course, there are other important practices your partner should follow when implementing Sitecore, such as configuring rendering caching, but these are the three biggest culprits we've seen when it comes to slow performance.

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4. Your images aren't optimized for fast-loading

If certain pages are loading slow but others are loading faster, you need to check your image sizes and make sure they're optimized.

Let's say your content editor uploads an image to the Sitecore Media Library that's 4000x6000. This huge image is utilized in various places on your website, on some pages in all its glory, but in most cases at just a thumbnail size of 100x150. Each time the image is displayed, the server has to send the full-size image to the user's browser, which takes more time than it would if it was just sending the smaller, thumbnail size.

Then, once it reaches your user's browser, the browser has to spend additional time resizing it from 4000x6000 down to 100x150. Since you didn't originally optimize the image, your user now has to wait longer as the image is transferred—and their browser has to resize it.

There are a few ways to fix this problem. One would be to load smaller sizes of the image in all the areas where it's a thumbnail. You can also use an image module that automatically compresses your images, or leverage a CDN to help serve more of your images faster to users.

5. Other site assets haven't been optimized

Most websites make use of a number of third-party JavaScript and CSS libraries.

These assets should be compiled, combined together, and minified to reduce the number of requests necessary to load them, as well as the amount of data transferred between the hosting environment and the visitor.

When this hasn't been done, it increases the number of requests and the amount of data your visitor has to load, slowing down your website.

What to do if your Sitecore site is slow

As you can see, many of the issues behind slow Sitecore performance are due to technical issues deep under the hood. These aren't immediately obvious, so for many



businesses, they lurk in your code—causing problems for your team, your customers, and your bottom line.

That's where a <u>Sitecore audit</u> by a team of knowledgeable Sitecore experts comes in handy. During an audit, your Sitecore partner will dig deep into your implementation to uncover these hidden issues that create big problems for your website. Whether your Sitecore website is slow due to technical debt, misconfiguration issues, or something else, an audit will root out the exact problem and present you with the solution to fix it.

Your Sitecore website doesn't have to be slow. Sitecore is a powerful platform that, when implemented properly, should load fast and perform optimally, anytime and every time. To learn more about how an audit can resolve your Sitecore problems, **contact Engagency**. Let's speed up your Sitecore website.