





Performance Driven Websites

Websites that deliver what your customers need fast, on any network and any device, are key to your success. Performant websites rank higher in search engine results, keep visitors' attention longer, and produce better conversion rates.

Web pages that consume too much data and are slow to load on mobile devices will lose you business. Potential customers in markets with slower connections won't stick around waiting to read your content. Search engines penalize you for bloated code and poor configuration choices, making visitors even less likely to find your offerings.

b13 combines and configures technologies—TYPO3 CMS, CDN, AMP and more—to build custom solutions for maximum performance. Our expertise in every aspect of the creation, delivery, and rendering of your digital experience and mission-critical content will deliver the best experiences and the most business value for you and your customers.

Accelerated Mobile Pages— Fastest Loading on Every Device

b13 builds your website to deliver content to mobile visitors blazingly fast using the AMP—Accelerated Mobile Pages—standard to devices that request it. AMP combines a strict set of presentation and rendering rules with delivery from the global AMP Cache.



Large font files can block your site's rendering. **AMP ensures that fonts are downloaded efficiently and early** by limiting what other resources can be prioritized by the browser.



AMP **limits the browser to a single layout operation** by limiting how scripts interact with the page.



Time-consuming style recalculations are minimized by making sure scripts are executed in the right order.



AMP removes extra resource requests and large files by forcing core styles to be included inline and limiting the size of the CSS data.

Content Delivery Networks— Bring Your Data to Your Users

At b13, we are content delivery network (CDN) experts. CDNs help make media-rich properties really fly and deliver great user experiences despite the masses of data needed. TYPO3—our CMS of choice—is optimized for use with CDNs, ensuring that as much data as possible is cached on CDN servers near your customers. The reduced load on your site's servers helps your TYPO3 deliver new content around the globe even faster.



Cache website configuration data, optimized media, and files on servers close to your users, **reducing network latency and increasing delivery speed.**



CDNs reduce load on the server, meaning TYPO3 will have more resources available and deliver new content even faster.



Setting up your application to use Cloudflare technologies like Railgun, we **minimize unnecessary data transfer**, ensuring that the connection between your server and the CDN is **as fast, efficient, and economical as possible.**

Caching—Build It Once, Serve It Over and Over

b13 takes advantage of TYPO3 CMS's powerful built-in caching to speed up page delivery on your website. We also configure it to work hand-in-hand with CDNs to make sure your visitors will get responsive images and videos optimized for their device and network conditions.



Statically cached files—and whole webpages—where possible **drastically reduce latency**.



TYPO3 caches all CSS code as static files, meaning **style information can be delivered instantly**.



TYPO3 caches and optimizes all JavaScript files, page-specific SVG maps, and resized, cropped and otherwise edited image files, so your **browser won't have to wait** for them.

Modern Image Formats—Smaller, Faster, Just as Pretty

Faster page loads increase time on page and conversions. We configure TYPO3 to work with modern image formats. Browsers that support them will load your content faster and more efficiently, speeding page loads and reducing bandwidth consumption for your visitors.



Images in **modern formats like WebP and JPEG XR** come in smaller files reducing the time it takes to load a page without reducing image quality.



b13 configures TYPO3 to support and suggest these more efficient image form. **Browsers** that support them **will pick the best format and download the smallest file.**

Minification—Deliver Enough and No More

b13 and TYPO3 help you respect your visitors' bandwidth and battery consumption while delivering them a faster experience. TYPO3 has built-in “minification” of HTML, CSS, and JavaScript files and supports it for SVG images, removing unnecessary information from files. We improve visitors' experience further, by combining and compressing already-minified files for delivery of the smallest possible files.



Minification removes unnecessary information from files, speeding their transfer across the network.



When using large standard libraries, we use minification to **deliver only the code needed for a given page request.**



TYPO3 can combine multiple minified files, **reducing the number of requests necessary** to retrieve the complete code, further **improving users' experience.**



Minified files can be compressed before delivery, ensuring that **no unnecessary data** is left to slow down the transfer.

HTTP/2—Modern, Secure, Fast Delivery Protocol

We can configure your TYPO3 website for faster and more secure page delivery using the newer HTTP/2 transfer protocol, also boosting its SEO ranking in the process (search engines love HTTP/2!).



Upgrading to the HTTP/2 protocol is perfect for fast page delivery. It offers **header compression** and can **handle concurrent requests much better** than previous protocols.



Using HTTP/2, **serving many files at once is less time consuming** than before. You can deliver CSS and JavaScript split up this way for newer browsers or concatenated into larger files for older browsers, where that is faster.

TYPO3 CMS—Our Choice of Fast CMS

TYPO3 delivers true responsiveness for the modern web. It has powerful support for creating responsive web pages, optimized for any device, screen size, and browser. Image handling (including built-in image editing tools!) has always been a strength for TYPO3. Up-to-date browsers supply information about device, window width, and screen resolution with a page request. TYPO3 can be set up to generate a range of image sizes and options for the browser to select based on its needs and deliver it all with device-optimized and device-specific CSS and JavaScript code.



Device-optimized and device-specific **CSS and JavaScript code** for optimal delivery to your site visitors.



Powerful support for creating responsive images, web pages, optimized for any device, screen size, and browser.



Faster page loads: TYPO3 compresses HTML, CSS, and JavaScript data before it is sent to you, regularly decreasing file sizes by 60%.



TYPO3 can be configured to **create images in any number of highly efficient formats** and includes information about what formats an image is available in, **allowing the browser to choose the optimal image compression.**



TYPO3 has powerful support for **creating device-optimized responsive web pages** and can deliver pages optimized for any device, screen size, and browser.



Device-specific JavaScript should only be downloaded by those devices that need it. We achieve this by **sending the right information to the browser.**



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