

WHITE PAPER COOKIES AND DATA PROTECTION

Speed Kit uses cookies in combination with Speed Kit Real User Monitoring (RUM). These cookies are required to analyze the data required for the smooth operation of Speed Kit and to provide Speed Kit's functionalities. This includes the early detection of misconfigurations, the detection of bots in order to block them, the provision of Speed Kit in a slow rollout, and predictive acceleration through Predictive Preloading.

Section 1 of this white paper describes the different cookies and their respective purposes. Section 2 then examines the legal classification of cookies and our perspective on the need for consent. Appendix 1 provides exemplary data protection information for the website operator's privacy policy based on the legal classification of this white paper. In this document, cookies are understood to be entries in document.cookie, localStorage and sessionStorage.

This white paper was authored by attorney-at-law Christian Schmoll, Data Protection Officer of Baqend GmbH, who will be happy to answer any questions you may have (privacy@baqend.com).

Disclaimer and limitation of liability: This white paper provides a general overview based on the information available at the time of writing. The white paper reflects the legal opinion of the author, but cannot and is not intended to replace individual legal advice. No liability is assumed for the completeness and accuracy of the content of this white paper and no claims can be derived from the information and statements in this white paper. It is recommended that you always seek independent legal advice from your lawyer.

1. Cookies and functionalities

The following cookies are set and read by Speed Kit during operation.

1.1 **baqend-speedkit-config**

This cookie stores a JSON object containing configuration parameters for Speed Kit. It is used to control the slow rollout, which is carried out during the configuration and test phase to ensure that the use of Speed Kit does not cause any errors.

The cookie is stored in the following format:

`{"group": "A", "testId": "10vs100"}`

To carry out a slow rollout, Speed Kit needs to know which group or version the website visitor has been assigned to; this is recorded in the cookie. When the collected data is analyzed, this makes it possible to distinguish how the website performs under different configurations. Errors in a slow rollout can therefore be detected at an early stage, without the majority of website visitors being exposed to them.

During the test phase, for example, different distributions (10%, 50%, etc.) are evaluated. The testId is required to associate the collected data with the corresponding test during analysis.

Cookie expiry: 6 months

1.2 **baqend-speedkit-user-id**

When Speed Kit runs, a random visitor identifier (ID) is generated in the browser for each domain.

This ID is stored in the cookie in the following format:

`R2fUvr6CsPp00Hm4RDeIAnYEj`

The ID is used to correlate data across multiple page views and sessions. This makes it possible, for example, to detect errors that only occur with returning users, or to observe effects on user behavior. The ID is also needed to identify bots, which typically behave differently from regular visitors; this abnormal behavior can be analyzed by linking multiple page views. In addition, average performance per user can be determined across all of their visits.

Cookie expiry: 6 months

1.3 **Predictive Preloading**

As an additional function for maximizing performance, Speed Kit uses Predictive Preloading. Speed Kit analyzes user behavior locally in the browser (e.g. mouse movements or hover events over links). Based on these interactions, Speed Kit predicts which page the visitor is likely to visit next and preloads the corresponding resources (HTML, images, scripts) in the background. This is done exclusively to reduce the loading time to almost zero when the user actually clicks. No cross-user profiles are created in the process.

2. Legal classification and consent requirement

2.1 Data processing when using Speed Kit

The purpose of Speed Kit is to accelerate the delivery and display of websites in the website visitor's browser.

When using Speed Kit, it is technically necessary for the accelerated delivery or display of the web pages that the requested URL (without personal components) and the IP addresses of the website visitors are transmitted to the Speed Kit provider. The IP addresses are immediately anonymized and Speed Kit then only processes anonymous user or session IDs.

Speed Kit also uses cookies. These cookies are necessary for security purposes, in particular for the detection of bots and the prevention of DDoS attacks, as well as for analyzing the performance of Speed Kit and the early detection of misconfigurations.

As an additional function, Speed Kit uses Predictive Preloading. It predicts click behavior in order to load HTML content and assets in the background before the user actually clicks. The sole purpose is to reduce the perceived loading time to an absolute minimum.

Speed Kit does not create personal profiles and no marketing or retargeting purposes are pursued.

Speed Kit also uses a Content Delivery Network (Fastly) as part of the acceleration process. A CDN accelerates the delivery of website content by caching it on numerous servers and serving it to the user from the server that is geographically closest. This makes the content available as quickly as possible.

2.2 Consent requirement

When using Speed Kit, the question arises whether explicit consent from website visitors must be obtained.

According to Section 25 TDDDG (Telecommunications Digital Services Data Protection Act – formerly TTDSG), which transposes the ePrivacy Directive into German law, consent must be obtained for the setting of cookies, regardless of whether or not personal data is processed with the cookies – unless the cookies are strictly necessary in order to provide a digital service "expressly requested" by the user (website visitor).

The question of what is "expressly requested" by the website visitor cannot be answered by reference to every component of the website accessed, since the existence of those components is not yet known to the visitor at the time of access.

The data protection supervisory authorities therefore differentiate between the basic "website" service and additional functions such as chatbots, maps, videos, etc. – and in the guidance for telemedia, the data protection supervisory authorities state:

"The basic service is often flanked by components so that it can be provided securely, quickly and stably. Such systems for user-oriented fraud prevention and IT security usually serve both the user and the website operator and are part of the basic service."

In addition, the Bavarian State Office for Data Protection Supervision (BayLDA) expressly states in its 2021 activity report:

"The user's request may also include cookies, which are used to ensure that the website is provided without errors..."

It can therefore be stated that a function such as Speed Kit, which serves the security, speed and stability of website access, can be regarded as part of the basic website service and as "expressly requested" by the website visitor and does not have to be considered separately.

The decisive factor for the question of whether consent is required is whether the use of Speed Kit is "strictly necessary" in order to make the website available. In this regard, reference can be made to the guidance issued by the data protection supervisory authorities, according to which, for example, load-balancing cookies and user-oriented security cookies do not require consent. The same reasoning applies to the use of Speed Kit and the cookies set by Speed Kit. As explained, these cookies are strictly necessary for security purposes and for analyzing the performance of Speed Kit and the early detection of misconfigurations – and thus for central functionalities in the context of providing the website.

The criterion of "strict necessity" is generally interpreted narrowly by the data protection supervisory authorities. However, the legal assessment must not turn on whether a website can be displayed at all, or whether no website could be displayed without the cookie. The assessment of strict necessity must take as its reference point the website in the form of the basic service requested by the website visitor. It is therefore not a question of whether a static HTML website in the style of the 1990s can be displayed after a longer loading time, but whether a modern website with appropriate security and acceleration functionalities can be displayed.

According to the French data protection authority CNIL, the exemption for strictly necessary functions can even apply to web analytics under certain circumstances if they are used exclusively for troubleshooting and optimizing technical performance.

Cookies are also regarded in the legal literature as "strictly necessary" for error analysis and security purposes.

Strict necessity of Predictive Preloading?

This reasoning on strict necessity under Section 25(2) No. 2 TDDDG applies equally to the Predictive Preloading function. Where local storage technologies on the end device are accessed in order to predict user behavior, or where IP addresses must, as a technical matter, be transmitted to the Content Delivery Network when preloading resources, this is done exclusively for the high-performance delivery of the requested content. Predictive Preloading is precisely such a flanking component, which serves to optimize technical performance and ensures that the basic service requested by the website visitor is provided without noticeable delays (that is, "quickly and stably").

Against this background, it is justifiable to regard the use of Speed Kit, including the cookies set and Predictive Preloading, in its entirety as "strictly necessary" within the meaning of Section 25(2) No. 2 TDDDG.

2.3 Classification under the GDPR

Any subsequent processing of personal data is governed by the GDPR. The legitimate interest of the website operator in a secure, fast and stable presentation of its website can be used as the legal basis for further data processing in the context of acceleration and analysis by Speed Kit. Recital 49 of the GDPR expressly recognizes the security of websites as a legitimate interest.

Appendix 1: Exemplary data protection information Speed Kit

Cookie banner entry for Speed Kit	
Description and purpose of data processing	The use of Speed Kit serves to accelerate the delivery or display of websites in the website visitor's browser. When using Speed Kit, it is technically necessary for the accelerated delivery or display of the websites that the requested URL (without personal components) and the IP addresses of the website visitors are transmitted to the provider of Speed Kit. The IP addresses are immediately anonymized and Speed Kit then only processes anonymous user or session IDs. Speed Kit also uses cookies and local storage technologies. These are required for security purposes, in particular to detect bots and prevent DDoS attacks, and to analyze the performance of Speed Kit and detect misconfigurations at an early stage. Speed Kit does not create any personal profiles and no marketing or retargeting purposes are pursued. In addition, Speed Kit uses the "Predictive Preloading" function to predict likely follow-up page views through local analysis of user behavior and to preload resources in the background in order to further minimize loading times. Speed Kit also uses a Content Delivery Network (Fastly) as part of the acceleration process. A CDN accelerates the provision of website content by temporarily storing the content on numerous servers and transmitting it to the user from the server that is geographically closest to the user, thus enabling the content to be provided as quickly as possible.
Processor	Speed Kit is provided by Baqend GmbH, Stresemannstraße 23, 22769 Hamburg, Germany, as a processor on the basis of a data processing agreement pursuant to Art. 28 GDPR.
Categories of personal data processed	IP address Requested URL User Agent Anonymous user & session ID Local interaction data (e.g. hover times) for Predictive Preloading
Legal basis	Section 25(2) No. 2 TDDDG (strictly necessary for technical reasons) Art. 6(1)(f) GDPR (legitimate interests, see above under "Description and purpose of data processing")
Place of processing	European Union worldwide (Content Delivery Network)
Storage period	The storage period for cookies is 6 months
Data recipients	Content delivery network, hosting provider, data analytics platform