

Web Filtering SDK

Quick and Accurate Categorization

Most web filtering technologies rely on domain databases, and that can lead to inaccurate detections on sites that span multiple categories or have injected content of a different type. Bitdefender's technology goes a step further to analyze web content and enable granular filtering of pages.

Where other solutions will label any Wikipedia page as "encyclopedia" or blog articles as "blog", Bitdefender's technology can differentiate between content categories at the page level and accurately label NSFW content on broad websites.

This technology works together with the Bitdefender URL and domain database, which is extremely comprehensive. It covers over 70 content categories, with over 200 million URLs and over 45 million domains. This also provides additional information about the security status of the URL (whether it is phishing, malware, fraud or known C2C URL). If you want to add web filtering capabilities to your product, there's no better technology than this SDK.

Features

Heuristics filtering: If an HTML page is provided, the SDK can categorize its content, applying heuristic rules to detect the web category.

Large database: If a URL or domain is provided, the SDK will query the Bitdefender proprietary database of 200+ million URLs, spread across more than 70 categories.

Partially cloud-based: Helps reduce the local database size and provide faster reaction to new threats.

Compatible with many technologies: The SDK offers native support for 32 and 64-bit systems, and it works on multiple operating systems from the same API, with simple C language bindings.

At-a-Glance

The Bitdefender Web Filtering Software Development Kit (SDK) can analyze a page URL and its HTML content, then categorize it. Partner applications can license this technology to augment existing security products or build a new solution on top of it.

Key Benefits

- ↳ **Granular, page-level detections:** The SDK's heuristics enable web filtering through HTML content analysis, leading to highly accurate, page-level detections.
- ↳ **Trusted Technology:** The Web Filtering SDK is extensively used by OEM partners and Bitdefender products.
- ↳ **Fast and Lightweight:** The SDK only takes up a few MBs of memory and storage, but it maintains lightning-fast responses. After calling the scan function, the status for the web page is returned within 200 ms.
- ↳ **Constantly evolving database:** The database of millions of URLs used by the SDK is constantly updated, drawing on threat intelligence from Bitdefender's large telemetry spread across industries and country borders.

How the Web Filtering SDK Works

After licensing the Web Filtering SDK, partners will receive a library of functions they can integrate into their own products with C language bindings.

To start a scan, the partner program needs to pass a URL and/or web page content to the scanning function. This URL will be checked with Bitdefender's URL Status Service, and the function will return its content category from over 70 options.

For granular, page-level detections, partners also need to provide the HTML content to the Web Filtering SDK.

This type of detection is crucial for websites having different sections belonging to different categories. For example, the New York Times is a news website, and it will be labeled as such by static analysis of its URL. However, the NYT website is increasingly popular for its games section. If the HTML content of that page will be passed onto the Web Filtering SDK, it will be accurately categorized as "Games" not "News."

Regardless of the type of scan (URL only, or URL and page), a verdict is returned in milliseconds.

FREE Evaluation

Evaluating the Bitdefender Web Filtering SDK is free of charge and includes technical support.

Contact us

For more information regarding the Web Filtering SDK please reach us at <https://www.bitdefender.com/oem/contact-us.html>

