Web Filtering Software Development Kit (SDK)

Evolving Web-Based Threats

The pervasive use of the web has made it one of today's preferred attack vectors for cyber criminals, but also one of the major factors impacting employee productivity or limiting corporate network traffic. As the internet is used for essential everyday business, web filtering security solutions can help organizations of all sizes reduce exposure to unwanted or inappropriate URLs and websites and prevent web use from becoming a major security risk.
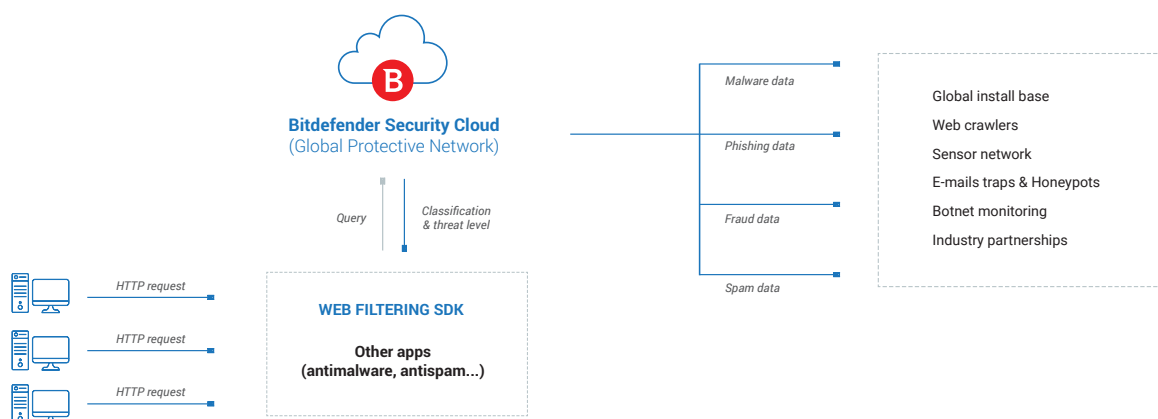
Bitdefender's Web Filtering SDK gives partners effective URL and web-page category-based filtering capabilities, allowing them to develop solutions that categorize URLs and websites in real time and further facilitate web access monitoring and control. This lets partners successfully address customers' concerns about security (e.g. by offering visibility into high-risk web categories that may introduce malware), while increasing employee productivity and freeing up valuable IT resources and network bandwidth.

Bitdefender Web Filtering SDK

The Web filtering SDK offers real-time URL and website categorization. The SDK uses both local and cloud filters to scan the URL and web page content supplied by the partner application and return the web categories to which they belong (e.g. business, gambling, illegal, mature content, social networks etc.).

How Web Filtering SDK works:

- The Web Filtering SDK is integrated into the partner's solution or service – e.g. desktop/mobile application, Web gateway, network filtering software
- The SDK analyzes the URLs requested by users; or both the URL and HTML content downloaded from the URLs, if provided
- The SDK first checks the local cache for the list of known web categories; if necessary, the SDK also queries Bitdefender's cloud for relevant updates
- Depending on the capabilities of the partner application, the device ultimately allows or blocks the URLs or web pages

Bitdefender Security Cloud (Global Protective Network) — Query, Classification & threat level — Malware data, Phishing data, Fraud data, Spam data — Global install base, Web crawlers, Sensor network, E-mails traps & Honeypots, Botnet monitoring, Industry partnerships — HTTP request — WEB FILTERING SDK — Other apps (antimalware, antispam...)

Market-Leading Coverage and Accuracy

Bitdefender's Web Filtering SDK uses a broad, up-to-date cloud-based database with millions of active URLs across 50+ domain categories for websites in different languages, and continuously maintains and expands web categorization. Powered by the Bitdefender cloud (Global Protective Network / GPN), web categories are updated through real-time detection from 500 million threat sensors globally and over 1 billion URLs queried every day through a global network of Bitdefender data centers. Data on new categories is transmitted to all global users almost instantly.

Unlike traditional web filtering solutions, the Bitdefender Web Filtering SDK relies on heuristics filtering and signatures, and only uses URL blacklists as an additional level of detection, ensuring highly accurate detection in a wide range of scenarios. The heuristic filter looks at the page content, and not just the URL, enabling advanced contextual analysis and precise categorization of legitimate and inappropriate websites.

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Features

- Broad coverage, including millions of relevant, active URLs and websites, in multiple languages
- 50+ domain categories, including high-risk ones (drugs, gambling, hacking, hate, illegal, porn etc.)
- High-accuracy detection ensured by heuristic filtering coupled with signatures and URL blacklisting
- Advanced heuristic techniques offer granular web page analysis and help fine-tune web categorization
- The combination of fast cloud URL lookups with a local database cache prevents any latency
- Offers around-the-clock cloud-based updates of web categories; domains are added or updated instantly
- Multiple scanning modes – scans content stored in either a disk file or in the process memory
- Full multi-threading and concurrency scan support, enabling parallel scans with minimal impact on resources
- Stable and mature technology stack, extensively used by Bitdefender products and SDKs
- Offers an easy-to-use API that keeps integration time to a minimum and is fit for a variety of use cases

Benefits

- Provides essential URL and web categorization, including high-risk categories (e.g. gambling, mature content)
- Helps reduce exposure to online content that is inappropriate, fraudulent or hinders users' productivity
- Heuristic filtering ensures a high degree of accuracy and precision in categorizing new and/or changing websites
- Cloud updates ensure that data on new categories is added in real time and transmitted to all global users
- High-performance and speed – 15,000+ URL queries / second from global users are processed via GPN
- Using local and cloud filters ensures high-speed scanning, with minimal impact on system resources
- Easy integration with multiple solutions, from desktop/mobile applications to dedicated server solutions
- Is fit for a variety of use cases, including integration with applications that allow setting policies for controlling web usage and network traffic in business environments or enforce parental control for children by blocking inappropriate content

Specifications

Seamless integration process; provides C language bindings

Supports multiple OSes (Windows, Mac, Linux) with the same API; native support for 32-bit and 64-bit platforms

FREE Evaluation

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

Contact us

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About Bitdefender Technology Licensing. Bitdefender provides end-to-end cyber security solutions and advanced threat protection to more than 500 million users in more than 150 countries. Since 2001, Bitdefender has consistently produced award-winning business and consumer security technology, and has become a provider of choice for leading Independent Software Vendors (ISVs), hardware vendors, service providers and enterprise organizations looking to integrate security technologies into their products and services. Today, Bitdefender has over 150 technology partners worldwide. More information is available at www.bitdefender.com/oem

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