

# Client-Server SDK

The Client-Server SDK is built on top of Bitdefender's core anti-malware engine, optimized for content scanning in web gateways, the cloud, virtualized environments, and others. It can scan objects from disk or data buffers in memory, and it offers full support for ICAP and SPAMD protocols.

Partners that develop solutions for servers, gateways or appliances can use the SDK to protect their product or build a security solution wrapped around it. Bitdefender's anti-malware engine constantly tops the charts of independent AV tests, with a 99,9% detection rate and minimal false positives.

The SDK is also easy to deploy, with dedicated support, code samples, and comprehensive documentation. Plus, it is compatible with other online security technologies from Bitdefender, like the Email Threat Protection SDK, URL Reputation and the Sandbox Service.

## Features

- ↳ **Modern Anti-Malware Engine:** Bitdefender's anti-malware engine combines traditional signature-based engines, with machine learning algorithms for generic detection, behavioral analysis, and feature extraction.
- ↳ **Full Multithreading Support:** Partners can configure scans to run on multiple threads, multiple processes, or in worker mode if they are using ICAP.
- ↳ **Complete Scan Control:** Options for scans include how aggressive detection engines will be, whether to unpack archives or not, whether to attempt disinfection, and plenty more.
- ↳ **Easy Integration:** Features a REST API (on a locally run daemon) allowing easy integration from any programming language. Additionally, it offers support for ICAP, SPAMD and clamd protocols.

## Protecting the Gateway: How the Client-Server SDK Works

The Client-Server SDK has two components: the client component, and the server component.

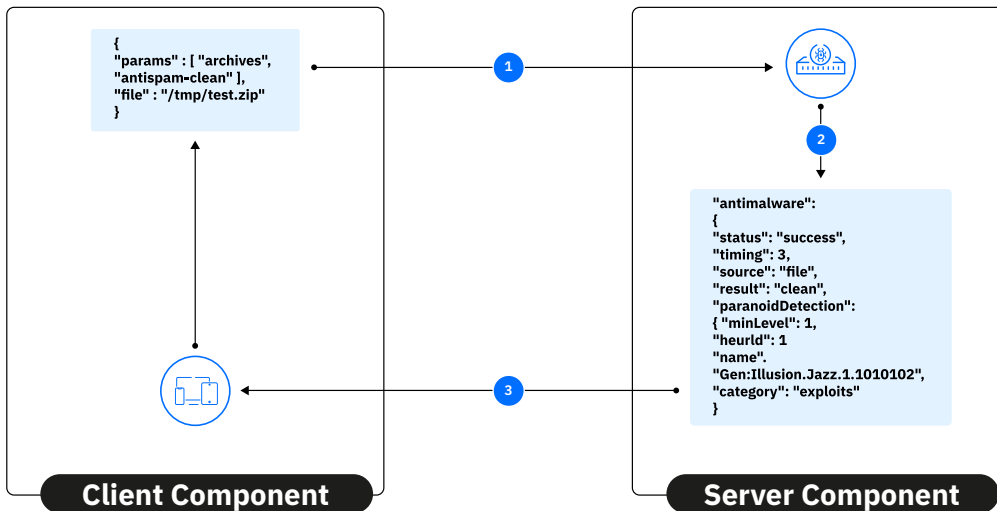
The client component requests scans by sending objects to the server as file paths, shared memory blocks, or full files (if the server is on a different machine). The server component scans these objects and returns a verdict to the client.

## At-A-Glance

The Client Server SDK lets you use Bitdefender's award-winning anti-malware engine in any gateway product. It can be a value-add for existing customers or justify premiums for new server protection features.

## Benefits

- ↳ **Superior detection rate:** Bitdefender's AI-powered anti-malware engine constantly achieves a 99,9% detection rate in independent tests, with minimal false positives.
- ↳ **Market-Tested:** The Client-Server SDK is already helping 50+ clients secure file upload services, file scanning kiosks for air-gapped networks and more.
- ↳ **Very Fast:** The Client-Server SDK's performance has been tested extensively on various types of objects. For a diverse sample of documents, images, and executables, the SDK can scan 41-114 files per second. For simpler tasks, it can scan over 2600 files per second.
- ↳ **Dedicated Support:** The Client-Server SDK comes with technical support, comprehensive documentation, sample code, template server configuration files, and more.
- ↳ **Fully Private:** The SDK performs scans offline. For features that require partners to send data to the Bitdefender Cloud, the information is anonymized for privacy. Compliance with data protection regulations can be contractually agreed.



- 1 The client component makes scan requests to the server component via the cmd line client, Java/C API, REST API, or the protocol level. Objects (including ICAP/SPAMD) can be scanned from disk, shared memory blocks, or as full files on remote servers.
- 2 The server component performs the scan to detect malware, spyware, adware, and any other threat. If the Email Threat Protection SDK or Sandbox Service are licensed, their capabilities are triggered too.
- 3 The server component sends a detailed verdict back in JSON format, detailing scan results, threat context, and any other relevant information. Most files are scanned in milliseconds.

The server component scans objects for malware, adware, spyware, ransomware and plenty more potential threats. The scan happens fully offline, and it is fast. For a diverse feed of objects, including documents, images, and executables, the server component can scan between 41-114 files per second, depending on the partner thread context. This can go up to 2600+ files per second for documents alone.

The client component can send any object for scanning to the server component, including files from disk, data buffers in shared memory, or full file paths. It then receives a verdict in milliseconds, detailing the file status, and a lot of extracted information, like threat context, whether the file is temporary, disinfection attempt status, and more. For partners that license the Bitdefender Email Threat Protection SDK, URL Reputation and the Sandbox Service, their capabilities can be fully integrated from the same interface. All requests can be made via REST API, encoded in JSON, with a verdict returning in the same format.

## FREE evaluation

Evaluating the Bitdefender Client-Server SDK is free of charge and includes technical support

## Contact us

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

