



# ANTI-MALWARE SDK

## CROSS PLATFORM

**Avira's Anti-malware SDK (SAVAPI), provides your customers with the industry's best protection against malware, zero-day, and advanced persistent threats.**

Implementing the Anti-malware SDK on your appliances, endpoints, and systems enables you to scan files locally for malware. It also lets you access real-time classification of unknown files using the [Avira Protection Cloud](#), and is complemented by the Avira URL Cloud which delivers URL threat classifications. The Anti-malware SDK provides a simple way for developers and providers of security products and services to get to market quickly. It saves you from the cost and delay of in-house development by leveraging the experience and knowledge of Avira's award-winning technologies. The Anti-malware SDK provides key security services, high-performance offline scanning, and an online connection to the Avira Protection Cloud for complete protection against malware.

Avira's Anti-malware SDK is used widely by hardware and software vendors looking to implement antivirus/anti-malware solutions.

It is employed extensively by endpoint-detection and managed-security service providers; next-generation firewall vendors; mail-gateway, unified threat-management, and software-utility providers; as well as service providers – anyone looking to integrate malware analysis into their product or service.

## INTEGRATION

The SDK is written in C and can be used by any common C/C++ compiler.

Several deployment scenarios offer a wide range of integration options, from the simplest to the more complex. These include:

**Library mode:** A C library available for Windows (32-bit & 64-bit), Linux, and MacOS, offers complete control of integration with callback support. Using callbacks for file operations (FOPS) means SAVAPI integrates easily into memory backed, virtual, and encrypted file systems.

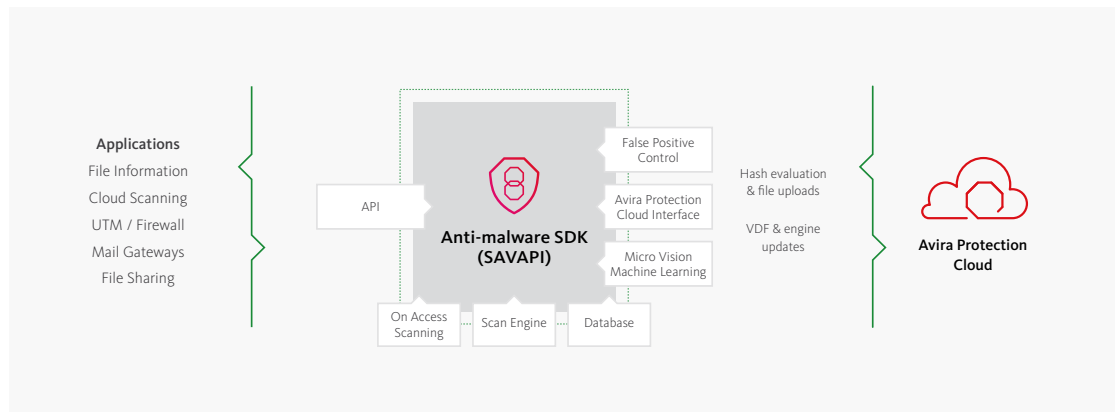
**Daemon/service mode:** A multi-threaded service or daemon listens to client requests on Unix and network sockets. A variety of integration methods are available including C#, Perl, Python, C, and C++.

### Key Features:

- Fast integration time, typically within hours
- Daemon updates without service interruption
- Supports scanning of all file types
- Offline scanning including signature based, heuristics and generic analysis
- Integrated machine learning providing local risk evaluation
- Integration with Avira Protection Cloud
- Real-time scanner extension providing enhanced detection
- False Positive Control



## ANTI-MALWARE SDK INTEGRATION EXAMPLE



### AVIRA PROTECTION CLOUD

Using Avira's Anti-malware SDK with the Avira Protection Cloud allows you to achieve >99.99% detection rates and protect customers from zero-day and advanced persistent threats.

When the Anti-malware SDK detects an unknown, unclassified, suspicious file, it sends a hash query to the Avira Protection Cloud. If the hash is reported as unknown (possibly zero-day malware) the file can be uploaded to the Avira Protection Cloud for analysis.

The Avira Protection Cloud uses innovative systems and algorithms – including Avira's third-generation AI platform, NightVision™ – to classify the file in real time and provide feedback to the anti-malware system.

The combination of a [lightweight scanning engine](#) with near unlimited cloud computing power delivers the best performing anti-malware solution available combined with a very fast response time.

### ON-ACCESS EXTENSION

On-Access is a real-time scanning extension. It enables Avira's Anti-malware SDK to scan files automatically that are accessed or executed at OS level. On-Access adds an additional layer of security by allowing scanning decisions to be made before other processes and prior to operating-system execution. It is fully configurable and offers multiple filtering capabilities, including inspection of file access and file execution events.

### FALSE POSITIVE CONTROL

False Positive Control is Avira's mechanism to ensure exceptional false positive detections are identified in real time and prevented from impacting the performance of anti-malware scanning. It is a no-cost option that can be enabled within Avira's Anti-malware SDK (SAVAPI).



## SPECIFICATIONS

### Size:

100MB

### Platform requirements:

Min 1.6GHz CPU  
512MB RAM for exclusive use  
1GB of Disk space for unpacking

### Supported OS:

Windows (32-bit & 62 bit), Linux,  
MacOS, FreeBSD, OpenBSD

### Implementation:

Pure Library Mode or  
Pure Daemon/Service  
Mode or ClientLibrary &  
Daemon/Service Mode

### Functionality:

>99.99% Detection rate  
Generic and heuristic Scanning  
Advanced archive scanner  
On-Access extension for Windows  
False positive control  
Avira Protection Cloud Integration

### Scanning and Detection:

Malicious Windows PE EXEs and DLLs  
Linux, MacOS, and Android malware  
Malicious scripts: JavaScript, VBScript etc  
Office docs and embedded macros

### Unarchiving:

ZIP, ZOO, ARJ, ARC, RAR  
Flag password protected archives

### Decoders:

MBOX, MIME attachments

### Adware and Spyware (selection):

Worms, mailers  
Web-based malware  
(HTML, JavaScript, VBS)  
Script viruses DOS Batch MIRC/ IRC  
script Shell script (Bash, etc.)  
PIF, INI, REG (ASCII)

### Viruses (selection):

Encryptors, Polymorphic,  
Metamorphic viruses, Stealth viruses,  
Boot/File/MultiPartite viruses  
Java Applets, file formats exploits  
SPR (Security or Privacy Risk e.g.: Jokes)  
Backdoors  
Trojans (Remote Access Trojans)  
Password/Keyloggers/DoS, Droppers etc.)  
Macro viruses (MS Office, Embedded  
Objects, Excel Formule, MSO/HTML, PDF)

## OUR AWARDS



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