

# Clam-AV Wrapper API Documentation

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## Base URL

`http://<host>:3000`

When running with Docker Compose, this is typically:

`http://localhost:3000`

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## Content Type

- `multipart/form-data` for file uploads
  - `application/json` for responses
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## 1. Health Check API

### Endpoint

`GET /health`

### Description

Checks whether the ClamAV service is reachable and responding.

### Request

- **Body:** None
- **Headers:** None

### Successful Response

**Condition:** ClamAV is reachable

```
{  
  "status": "REACHABLE"  
}
```

- **HTTP Status Code:** 200 OK

### Failure Response

**Condition:** ClamAV is down or unreachable

```
{  
  "status": "UNREACHABLE"  
}
```

- **HTTP Status Code:** 503 Service Unavailable
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## 2. Scan File API

### Endpoint

POST /scan

### Description

Uploads a file and scans it for malware using ClamAV (INSTREAM mode).

### Request

- **Content-Type:** multipart/form-data
- **Form Field:**

Key	Type	Required	Description
file	File	Yes	File to be scanned

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### 2.1 Clean File Response

**Condition:** File is clean (no virus detected)

```
{  
  "status": "CLEAN",  
  "scannedBytes": 12345,  
  "timeTaken": 2345  
}
```

- **HTTP Status Code:** 200 OK
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### 2.2 Infected File Response

**Condition:** Virus detected in file

```
{  
  "status": "INFECTED",  
  "virusName": "Eicar-Test-Signature",  
  "scannedBytes": 12345,  
  "timeTaken": 2345  
}
```

- **HTTP Status Code:** 200 OK
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### 2.3 ClamAV Unreachable / Scan Error

**Condition:** ClamAV service is down or unreachable during scan

```
{  
  "status": "UNREACHABLE",  
  "error": "ClamAV service is not reachable"  
}
```

- **HTTP Status Code:** 503 Service Unavailable

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## 2.4 Validation Errors

**Condition:** - File size exceeds configured limits - Invalid request format

```
{  
  "status": "ERROR",  
  "error": "File too large to scan"  
}
```

- **HTTP Status Code:** 400 Bad Request
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## Status Codes Summary

Status Code	Meaning
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200	Request successful
400	Invalid request or validation failure
503	ClamAV service unavailable

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## Notes

- Maximum file size and scan limits are configurable via environment variables.
  - Scans are concurrency-limited to protect the ClamAV daemon.
  - Only in-memory (buffer-based) scanning is supported.
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## Example (Postman)

- Method: POST
- URL: <http://localhost:3000/scan>
- Body → form-data
  - Key: file
  - Type: File
  - Value: Select file